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Abstract

This document reports the results of a study commissioned by the American Federation of Teachers to examine the needs of the public schools during the decade ahead, and to propose a plan by which federal, state, and local resources can be marshalled to meet these needs. The essential aim of the proposed plan is "to achieve by 1977 an average level of public-school performance in every state at least equal to a nationwide minimum standard of equalized excellence." The seven quantitatively defined goals ("minimum standards of excellence") which the report identifies and analyzes are based on data compiled at the state and/or regional level. They relate to the areas of (1) per-pupil outlays; (2) student enrollment, (3) teacher-pupil ratio; (4) teachers' salaries; (5) nonteaching instructional staff; (6) noninstructional current outlays; and (7) available supply of classrooms. The proposed 10-year plan is based on the principles of cost analysis and on a recommended formula for cost-sharing--a formula which recognizes and provides for the unequal distribution of economic and financial capabilities among regions and states. Underlying the presentation is the recognition that the first and most essential step is federal legislation which would reflect a reordering of national priorities and a commitment of the nation and people at large to achieving the goal of adequate education in the public schools. (JS)

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ACHIEVING NATIONWIDE EDUCATIONAL EXCELLENCE

A Ten-Year Plan
To Save The Schools

Leon H. Keyserling

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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Preface

In early 1968, the American Federation of Teachers commissioned Leon H. Keyserling to undertake a comprehensive study of the needs of our public schools during the decade ahead, and of how the resources could be marshaled to bring every public school in the U. S. up to standards compatible with the right of every child who attends or should attend the public schools to an excellent education through the secondary level. The AFT turned to Mr. Keyserling because he had previously done much more limited studies in the same field, and because of his recognized capabilities and forwardlooking viewpoint.

This study, *Achieving Nationwide Educational Excellence,* was published fully in the Summer/Fall issue of *Changing Education,* a Journal of the AFT. In that form, it has had very wide distribution, and has elicited interest indicating broad and vigorous commitment to its goals and their attainment.

More recently, Mr. Keyserling has offered to make this study available to many others by reissuing it, with some of the data brought further forward, through the *Conference on Economic Progress.* The AFT welcomes this, because the condition of our public schools today, and the vigilant pursuit of what they should be tomorrow, must be of interest to every citizen, and not just to those in the teaching field or affiliated with teachers' organizations.

As the study itself so well says:

> "The current condition of our public schools tests our very morality and purposefulness as a nation and a people. If we cannot achieve the nationwide consensus and marshal the will and resources to move forward quickly and adequately on this nondebatable and nonpostponable front, we surely cannot do so with respect to the other very serious problems confronting us. Moreover, some of these other problems will be greatly reduced if we get our public schools in better shape."

I hope that all who can be reached by this study will read it thoughtfully and that, in consequence, our determination to transform the American system of education into the effective social instrument we need will be renewed and revitalized.

DAVID SELDEN
President
American Federation of Teachers

Acknowledgements

Somewhat more than half of the gross cost of the original preparation of this study was financed by the American Federation of Teachers, the balance being financed by the Conference on Economic Progress and by Leon H. Keyserling personally. The cost of publishing the study in its original form in an organ of the American Federation of Teachers was borne by that organization.

The cost of updating this study in its current form, and of its current publication, in the series of studies issued periodically by the Conference on Economic Progress, has been borne by the Conference.

The author of the study is especially indebted to Richard G. Seefer for his assistance in its preparation, and also to Sheila B. Sherwood, Nina C. Simmons, and Joan M. Davenport for their help with the research and the charts. Cynthia V. Elson, Catherine A. Parsell, and Josephine I. Bibik have been very helpful in typing the manuscript.

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I. The Nondebatable, Nonpostponable Problem

Where do we stand?

We in the United States are now confronted with many great problems, both domestic and international. With respect to some of these, the pertinent facts are subject to disagreement and the proper remedies to debate; the appropriate division between private and public responsibility is not clear; and some of the solutions may even be postponable for a while.

But the problems of our public schools, and what to do about them, are neither debatable nor postponable. The facts are indisputable: In some States, 10 percent of those who should be in the public schools are not there at all. The shortage of teachers, and especially of fully qualified teachers, is acute in many areas. Teachers' pay is grossly inadequate. Many classrooms are overcrowded, and much of the physical plant is shabby, outmoded, or even dangerous. The correlations between deficient public schools and poverty, unemployment, reduced earning power in later years, and social aberration, have been set forth repeatedly in many well-known studies.

Nor are the appropriate remedies debatable, except in detail. We know that much more of our resources must be channeled into the public schools, and that this is a public rather than a private responsibility. We know that the vast disparities among the States and localities in the amount of progress needed, and in their economic and financial capabilities, make it imperative that the Federal Government's share in the support of our public schools be greatly increased.

Nor is the solution postponable. The damage done to the undereducated child, and to the child not in school at all, cannot be repaired at some distant date. It is immediate and irreparable, and in most cases it has cumulative effects throughout the lives of the victims. We know that these cumulative effects do injury to us all, and not just to the immediate victims.

For these reasons, the current condition of our public schools tests our very morality and purposefulness as a nation and a people. If we cannot achieve the nationwide consensus and marshal the will and resources to move forward quickly and adequately on this nondebatable and nonpostponable front, we surely cannot do so with respect to the other very serious problems confronting us. Moreover, some of these other problems will be greatly reduced if we get our public schools in better shape.

Toward equalized excellence in our public schools by 1977

We need to start as soon as possible, under the galvanizing influence of new and adequate Federal legislation, but involving related efforts at all levels, a balanced 10-year program during 1968-1977 inclusive to achieve by 1977 an average level of public-school performance in every State at least equal to a nationwide minimum standard of equalized excellence. This does not mean a ceiling or straightjacket. Each State would receive enough Federal aid (contingent upon continued State and local efforts, based upon recent trends and capabilities) to reach these nationwide minimum standards of excellence by 1977. Yet the States and localities should and would be free to go as far beyond these nationwide standards as their own resources would permit.

The main goals for 1977 are:

(1) *Per-pupil outlays for all purposes related to public schools,* measured in 1967 dollars, should average $1,534 in 1977 in every region and State, compared with a nationwide average of $660 in 1967.

(2) *Enrollment in the public schools,* from kindergarten through four years of high school, should include every child aged 5-17 not served by private schools, i.e., a participation rate of 100 percent of the public-school population, by 1977. Today, the nonparticipation rate—the portion of the public-school population not enrolled—is as high as 9 percent in one region, and even higher in some States. To attain full participation of a group growing in number, nationwide enrollment needs to increase from 43.0 million in 1967 to 45.7 million in 1977, or 6.3 percent.

(3) *Classroom teachers* should increase greatly in number. By 1977, the ratio of fully accredited classroom teachers to enrollment should be 1 to 20 for the nation, and also in every region and State. The nationwide ratio in 1967 was 1 to 24. This calls for a nationwide increase in classroom teachers from 1,788,000 in 1967 to 2,286,000 in 1977, or 27.8 percent. Including replacements, more than 2,152,000 new teachers will be needed over the decade.

(4) *Teachers' salaries* in the public schools, measured in 1967 dollars, should rise from a nationwide average of $6,830 in 1967 to a nationwide average of at least $10,711 in 1977. This represents an average annual increase of 4.6 percent, exclusive of needed cost-of-living increases, with a more rapid rate of increase through 1970 to overcome the serious

lag as of 1967. To attain the minimum standard of excellence in the treatment of both pupils and teachers, the average by 1977 should be at least $10,711 in every region and State.

(5) *Nonteacher instructional staff* throughout the nation should rise from 188,000 in 1967 to 1,523,000 in 1977. Some of this increase would be for principals, supervisors, librarians, and guidance and psychological personnel. But more than 1,100,000 of the increase should represent individuals (not fully accredited teachers) assisting teachers in instructional functions. The average salaries of nonteacher instructional staff should rise at the same rates as those of teachers.

(6) *Noninstructional current outlays* need to be increased greatly for administration and operation and maintenance of plant, salaries of noninstructional personnel (including school aides), and programs for summer schools, adult education, and school lunches.

(7) *The available supply of classrooms* in the public schools should rise from 1,653,455 in 1967 to 2,285,000 in 1977, to take care of increased enrollment and reduced class size. Taking account also of elimination of unsatisfactory conditions and migration and abandonment, 1,232,000 classrooms should be constructed during 1968-1977 inclusive.

The total cost and how it should be shared

Total nationwide outlays to meet public-school needs, up to the nation-wide minimum standard of excellence, should rise from $28.3 billion in 1967 to $70.1 billion in 1977, measured in 1967 dollars, or at an average annual rate of increase of 9.5 percent.

Drastic changes in the sharing of costs between the States and localities on the one hand, and the Federal Government on the other hand, are imperative to achieve the various goals. This is because of the very unequal distribution of economic and financial capabilities among regions and States; the fact that progress must be so much faster in some regions and States which, through no fault of their own, are now most below the 1977 goals for excellence; the fact that, during 1946-1966, State and local outlays for all purposes rose more than 3 times as fast as Federal outlays for all purposes, while State and local debts grew more than 10 times as fast as the national debt; and the preemptive advantage enjoyed by the Federal Government in raising revenues by methods consistent with equity and economic growth.

In 1967, the State and local share of the $28.3 billion of total outlays for our public schools was $26.0 billion or 91.9 percent, and the Federal share was $2.3 billion or 8.1 percent. By 1977, under the proposed program, the State and local share of the total $70.1 billion cost would be $42.8 billion or 61.1 percent, and the Federal share would be $27.3 billion or 38.9 percent, all measured in 1967 dollars.

The recommended formula toward this end is that the increases in outlays by each region and each State should continue approximately in accord with their respective recent rates of increase (adjusted somewhat upward in accord with goals for a somewhat more rapid average annual rate of income and economic growth throughout the nation), and that the Federal Government should make up the difference in each region and State, subject only to the modification that in no State in any year shall the Federal percentage share of total outlays be below what it was in 1967. This means, among the States, that there will be great variations in the relative rates of increase in total outlays and in respective State and local and Federal outlays, as well as in respective State and local and Federal shares. These variations are essential to equalize services in all regions and States, up to the minimum standard of excellence, despite vast differences among them in economic and financial capabilities and in the size of the job to be done.

We can well afford the cost of the program

Under the proposed program, the increase in State and local outlays for our public schools would be approximately in accord with recent trends. The increase in Federal outlays, rising from $2.3 billion in 1967 to $27.3 billion in 1977, contemplates in 1977 total Federal outlays for education (public school and other) rising from $4.7 billion in the fiscal 1969 Federal Budget to $32.9 billion in calendar 1977.

In a fully-growing economy, the rise would be from an estimated 0.53 percent of total national production in fiscal 1969 to an estimated 2.36 percent in calendar 1977. By way of contrast, in fiscal 1969, proposed outlays of $89.5 billion in the Federal Budget category of national defense, space technology, and all international came to 10.11 percent of estimated total national production. Allowing for needed expansion in public programs and services across the board in response to all of our major national needs, and even assuming (without arguing for) substantial further increases in Federal outlays for national defense, space technology, and all international, this would still be true: In a properly expanding national economy, total Federal outlays for all purposes, estimated at 21.02 percent of total national production in fiscal 1969, would be smaller in ratio to total national production in calendar 1977. The implication is that the proposed program would not require Federal tax increases.

Measured in fiscal 1969 dollars, our total national production was $829 billion in calendar 1967. With optimum economic growth, it should rise to $1,396 billion in calendar 1977, and, even at a considerably lower growth rate, to $1,170 billion. This means that our *average annual output* of goods and services during the 10 years 1968-1977 inclusive would be $303-178 billion higher than it was in calendar 1967. With an "economic growth dividend" within this range, we should be willing to use 7.2 percent of the higher "dividend," or 12.2 percent of the lower "dividend," or 21.8 billion dollars on the average 1968-1978, to increase our total investment in our public schools.

What about inflation?

The problem of inflation is really irrelevant to the proposed public-school program. With optimum or even adequate economic growth, the program would place no excessive pressures upon our ability to turn out goods and services. But even if it should exert such pressures at some time, we should not sacrifice first what we need most, but instead should reorder our national priorities and values so as to put first things first by imposing some very small restraints upon the expendable or superfluous. Entirely hypothetically, if the proposed $70.1 billion level of total expenditure for our public schools in 1977 should require a cutback somewhere of even as much as $20 billion to curb inflation, that $20 billion would be only about 3.5 percent of our "economic growth dividend" in 1977 alone. It would be about 1.4 percent of our total national production in 1977 alone, under conditions of full resource use. We could certainly find better places to make cutbacks of this size than in our public schools.

The first essential step in the proposed 10-year program is Federal legislation, committing the nation and the people at large to action of incalculable benefit to the nation and people at large.

Comment on treatment of regions and States

Throughout the study, a very large part of the basic data, analysis, and projections or goals is set forth in terms of eight regions of the U.S., within which the 50 States and the District of Columbia are grouped. This method is essential to manageable presentation. However, a large part of the basic data upon which the study rests is not available by region. Even more important, for reasons going to the very content and purpose of the study, all of the basic data, analysis, and projections have had to be developed by States in the work underlying the study. Thus, the regional presentation represents a convenient summation of the examination of the States within each region. This in itself indicates the size of the work program involved in preparing the study. The States grouped within each region are shown on the chart on page 55.

II. Education: Weapon Against Poverty

It is fundamental to our national aspirations that the main drive toward improved education for our people is noneconomic in nature. Ultimately, all of our national aspirations are human rather than materialistic; they focus upon development of the human personality for its own sake. Even if our technology were to advance to the point where there could be a land of milk and honey for all, despite millions of illiterates, we would find this circumstance utterly intolerable.

Meanwhile, this philosophic dedication to ultimate aims cannot distract us from the practical aspects of life and living today. The millions who remain illiterate, or relatively uneducated by modern standards, are not enjoying milk and honey. They constitute a substantial portion of the almost one-third of our citizens—the poor or deprived*—who are still denied generous participation in the fruits of our economic progress. In an earlier and simpler society, the illiterate, poor, and deprived may have been "happy and contented," or at least some of those more fortunate were inclined to say so and forget about the problem. Not so now. We have had forcibly impressed upon us that the illiterate or relatively uneducated, the poor and deprived, are not happy nor even contented. They are alienated, resentful, and restive. By all economic, social, and civil tests, they impose a heavy and dangerous burden upon our nation and all our people.

There may be widespread debate as to the balance to be struck between personal shortcomings and social default in explaining the massive economic disenfranchisement which still persists. But it is no longer open to challenge that there is an intimate association between inadequate education and the poverty among one-seventh of a nation which it is our top national priority to eradicate.

There also may be some debate as to whether the failure of so many to move from high school to college is due to some fault within themselves, or to circumstances beyond their control. But the failure of so many to get through high school or even through elementary school, and the inadequacies of our public school system even when measured against pupils in attendance, reflect clearly a default in public responsibility.

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* The deprived are those above poverty, but below the income requirements for a minimum adequacy standard of living.

We cannot even pass judgment upon the individuals who drop out of school until we eradicate the pervasive conditions, inside as well as outside the schools, which aggravate the dropout phenomenon. And the term "public responsibility" is doubly appropriate because the default resides mostly in the neglect of our *public* schools.

What this default does to the immediate victims—and how it is both cause and consequence of their shabby and oppressive over-all economic and social environment—requires no elaboration at this point. But how it relates to the evils affecting the nation and people at large deserves even more precise examination than has generally been undertaken.

Correlation between deficient education and poverty and deprivation

In 1966 (later comprehensive data not available), 35.9 percent of the multiple-person families in which the family head had less than eight years of elementary education had annual incomes of less than $3,000, compared with only 8.0 percent of the families in which the head had four years of high school education, and only 4.4 percent where the head had four or more years of college education. A multiple-person family income of $3,000 is 10 percent below the currently accepted poverty-income ceiling.

Above those living in poverty, but with incomes below those needed for a minimum adequacy standard of living in the American context, are those living in deprivation. A rough measure of this condition for a multiple-person family is an income between $3,000 and $6,000. In 1966, this deprivation prevailed among 31.4 percent of the families in which the head had less than eight years of elementary education, contrasted with 20.2 percent where the head had four years of high-school education, and only 9.2 percent where the head had four or more years of college education.*

Viewing unattached individuals or single-person families, 71.0 percent in 1966 had incomes under $2,000 among those with less than eight years of elementary education, contrasted with 32.2 percent among those with four years of high-school education, and only 19.2 percent among those with four or more years of college education.**

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* See chart on page 12.
** See chart on page 13.

There has perhaps been excessive concentration upon deficient education as *the* cause of poverty, and this error is closely allied with an erroneous tendency to ascribe poverty mainly or wholly to personal shortcomings. For example, poverty is so highly concentrated among the aged, not mainly because of faulty education and low income during their working years, but mainly because our social security systems have not been brought fully abreast of the needs of today and our current economic capabilities. Poverty is so highly concentrated among the farm population, but not because they are relatively uneducated (although it is true that educational services and opportunities in rural areas are even more inadequate than elsewhere). Indeed, we have been told that the gross disparities in farm income have existed because the farmers have produced too much, which could hardly be because they are uneducated or incompetent. The disparities in farm income have persisted, and spawned much poverty in their wake, primarily because of inadequate national farm policies.*

Nonetheless, inadequate education is certainly a powerful factor in causing and perpetuating poverty—quite apart from the pernicious consequences of inadequate education on so many other scores.

Earning capacity related to years of schooling

Earning capacity in itself may not be a test of happiness or contentment. But granted many exceptions, it is in the main an accepted test (under the American system) of productivity and marginal usefulness to society.

Aside from the correlation between deficient education and poverty already depicted, it is relevant to examine studies of the lifetime incomes of males aged 25 to 64. In 1965, average lifetime earnings (measured in 1967 dollars) were $145,556 for those with less than eight years of schooling; $202,388 for those with eight years of schooling; $273,383 for those who completed four years of high school; and $437,557 for those who completed four or more years of college.

Thus, to the extent that usefulness to society is reflected in the economic reward received by the individual, the lifetime "usefulness" of those with less than eight years of schooling is exceeded by 39 percent in the case of those who have completed grammar school; 88 percent by those who have obtained a high-school diploma; and 200 percent by those who have received a college degree or gone even beyond that.*

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* For a fuller discussion of this aspect of the poverty problem and its causes, see ***Progress or Poverty,*** prepared by the author of the current study and published by the Conference on Economic Progress.

As of March, 1967, the median money income of those 18 years of age and over in the labor force was $2,784 for those with less than eight years of schooling; $5,518 for those with eight years of schooling; $6,924 for those with four years of secondary education; and $9,840 for those with four years or more of college training.**

Education as a job upgrader

The advance of technology and automation, combined with changing patterns of consumption and investment, have generated and will continue to generate profound changes in the composition of the labor force and in employment opportunity.

From 1967 to 1975, it is estimated that employment among all white-collar workers will advance 23.6 percent, with increases ranging from 30.6 percent for professional and technical workers to 20.0 percent for clerical workers. In sharp contrast, the estimated increase in employment for all other nonfarm workers (service and blue-collar) is only 14.0 percent, ranging from 28.7 percent for service workers and 15.8 percent for craftsmen and foremen to as low as 5.9 percent for operatives and 1.9 percent for nonfarm laborers.

The data on median school years completed by occupation corroborate the natural presumption that these shifts in employment opportunity call for advancing levels of education. As of March, 1967, among employed persons 16 years of age and over, the median school years completed was 16.3 among professional and technical workers, compared with only 10.8 among operatives, and only 9.5 among nonfarm laborers.***

The fact that the median school years completed for the entire civilian labor force was only 12.3 in 1967 reveals that we still have a long way to go, toward bringing educational training into line with a vigorously changing economic society. There was encouraging progress in that this median rose very substantially from 9.1 years in April, 1940, to 12.0 years in March, 1959. But there is grave warning in that it advanced very slightly —only to 12.3 years—from March, 1959, to March, 1967.****

Educational attainment related to unemployment

There is an even more insistent warning in this: As of March, 1967, among those in the labor force aged 18 and over, the unemployment rate was only 1.1 percent among those with four years or more of college training and 3.2 percent among those with four years of secondary training. This contrasted with 4.5 percent unemployment among those with eight years of schooling, 4.8 percent among those with five to seven years of schooling, and 5.1 percent among those with less than five years of schooling.*

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* See chart on page 14.

** See chart on page 15.

*** See chart on page 16.

**** See again chart on page 15.

The foregoing data grossly understate the relationship between unemployment and deficient education. It is well known, for example, that the unemployment rate runs up to 30-40 percent in some critical urban areas, and has tended to average two to three times the nationwide average among teenagers and blacks. While many factors explain this, a wide range of current national policies stem from the legitimate observation that deficient education is a basic factor in unemployment.**

Correlation between deficient education and mental capacity

One costly result of the deficiencies in our educational system—although many causes outside the school contribute to this result—is the nonparticipation rate, representing the portion of children aged 5 to 17 not enrolled in school. Putting aside those in private schools, and focusing upon the public-school population, the nonparticipation rate in 1967 was negligible in three regions (Great Lakes, Plains, and Far West), 0.3 percent in New England, 1.0 percent in the Rocky Mountains region, 3.5 percent in the Mid East, 4.8 percent in the Southwest, and 9.0 percent in the Southeast. There is a rough relationship between these data and the median school years completed by males 25 years and over, which in 1960 (later comparative data not available) ranged from 11.7 years in the Far West to only 8.8 years in the Southeast.

In 1966, the portion of draftees failing the Armed Forces mental test exhibited a very significant correlation with nonparticipation rates. In the Plains and Rocky Mountains regions, where the nonparticipation rate is negligible, the failures were in the neighborhood of 2 percent of the draftees. In the Mid East, where the nonparticipation rate is 3.5 percent, the failures were 7.2 percent; and in the Southeast, where the nonparticipation rate is 9.0 percent, the failure rate was 13.4 percent.***

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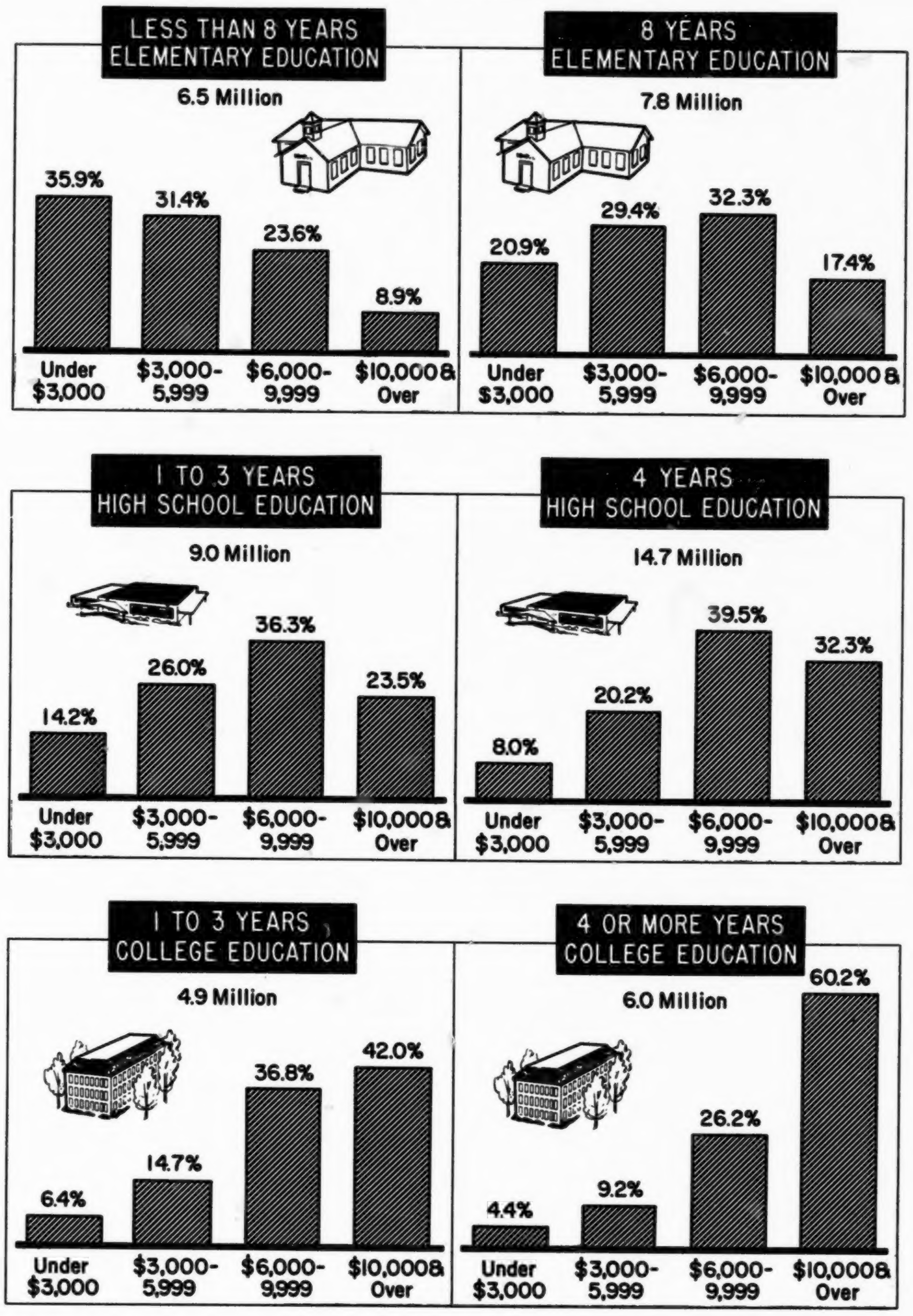
* See again chart on page 15.

** To avoid *excessive attribution* of unemployment to the personal characteristics of its victims, including their deficient education, see *Progress or Poverty*, cited above.

*** See chart on page 17.

EDUCATION FACTOR IN INCOME AMONG FAMILIES IN U.S., 1966

**All Families Grouped by Years of Education of Family Head
And Percent in Each Income Group**

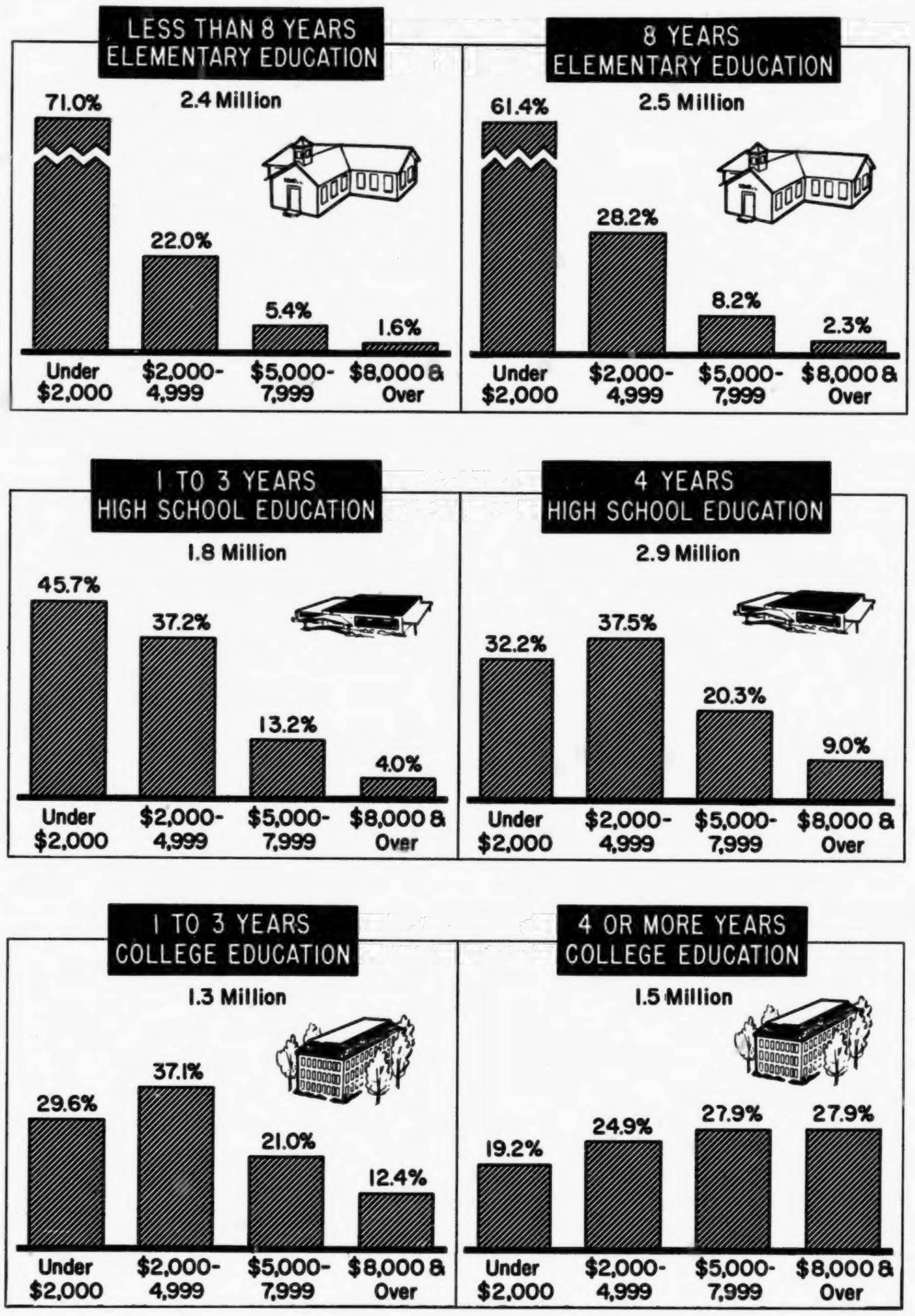


Source: Bureau of the Census, Dept. of Commerce.

Note: Due to rounding, totals may not add to 100%.

EDUCATION FACTOR IN INCOME AMONG UNATTACHED INDIVIDUALS IN U.S., 1966

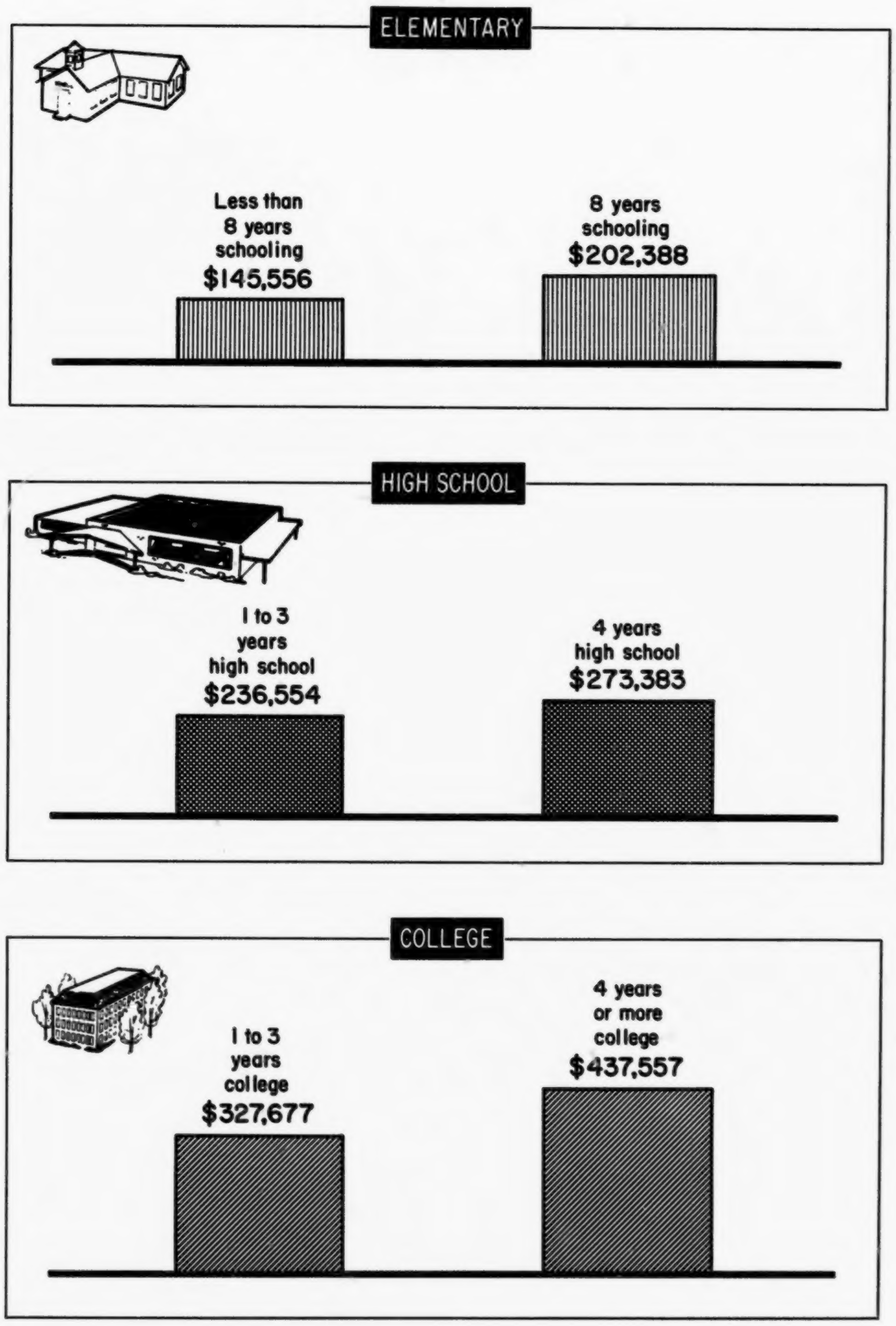
All Unattached Individuals Grouped by Years of Education And Percent in Each Income Group



Source: Bureau of the Census, Dept. of Commerce.
Note: Due to rounding, totals may not add to 100%.

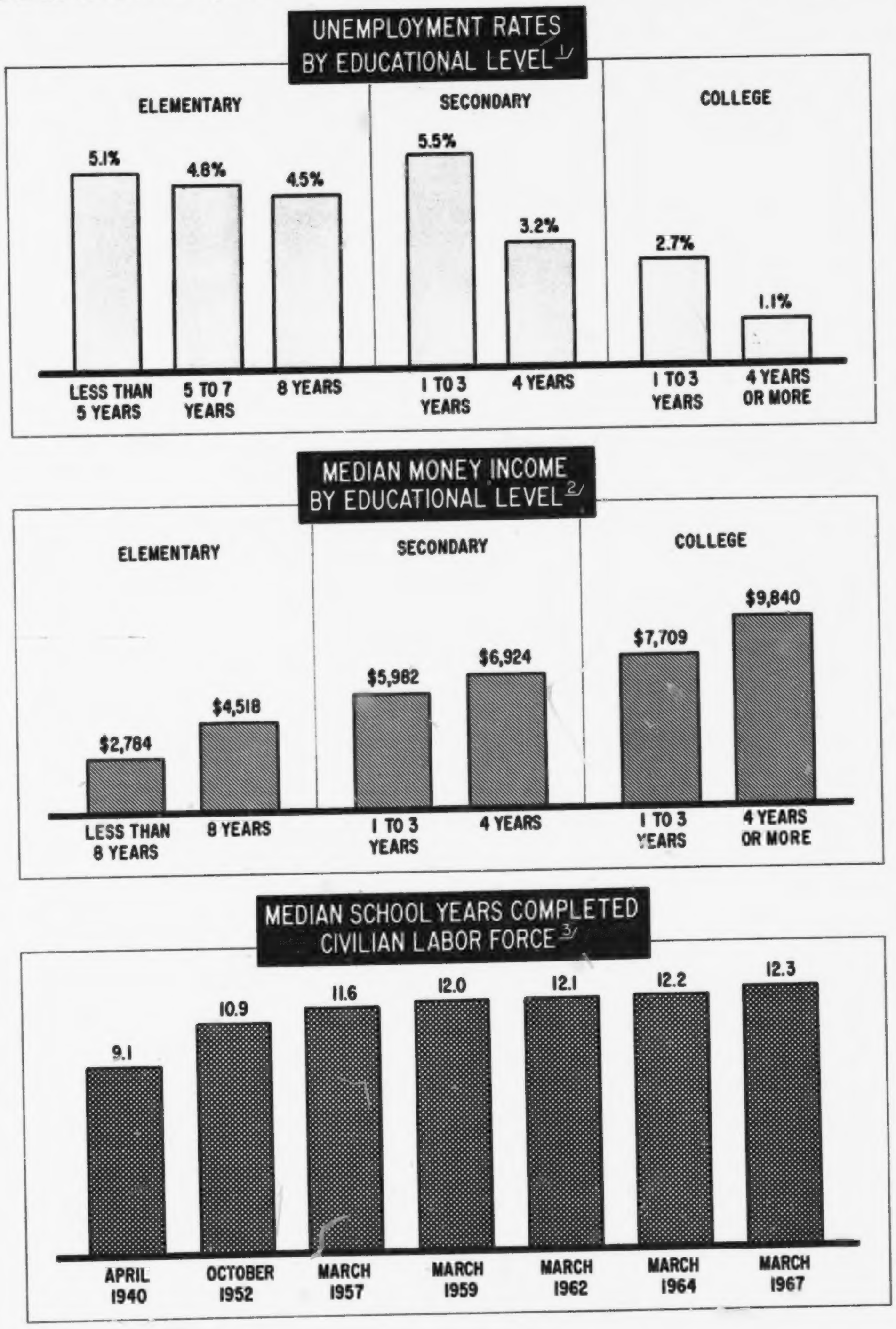
LIFE-TIME INCOMES OF MALES AGE 25-64 BY YEARS OF SCHOOL COMPLETED

(Estimated as of 1965, in 1967 dollars)



Basic Data: Office of Education, Dept. of H.E.W.

EDUCATION RELATED TO UNEMPLOYMENT & INCOME, U.S.



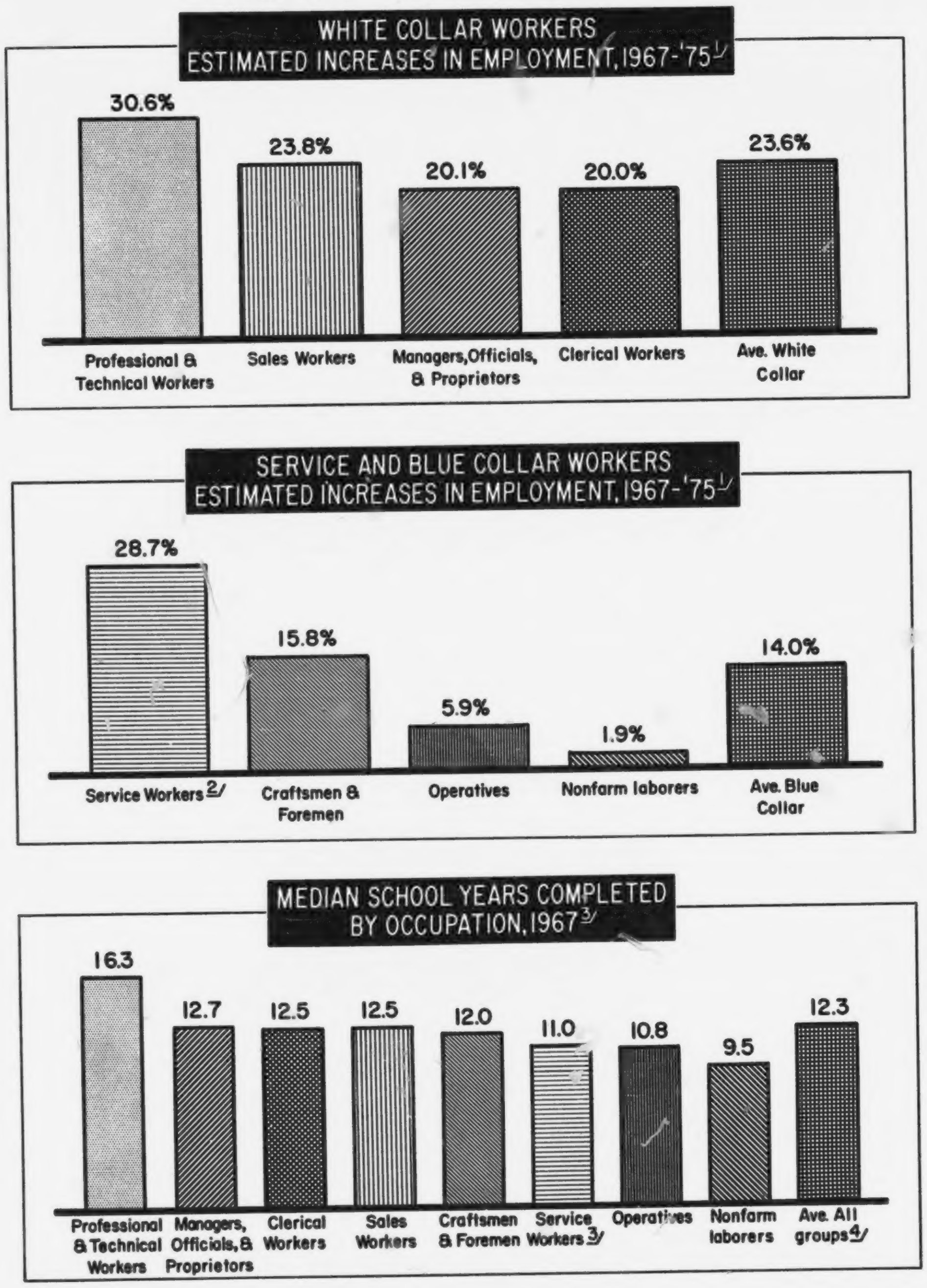
1/ Based upon labor force, 18 years of age and over, March 1967.

2/ Based upon 1966 incomes of males 25 years of age and over as of March 1967.

3/ Based upon ages 18 and over.

Source: BLS, Dept. of Labor, Bureau of the Census, Dept. of Commerce

THE FASTEST GROWING OCCUPATIONS GENERALLY REQUIRE MORE EDUCATION



1/ Data relate to average annual employment of persons 16 years and over.

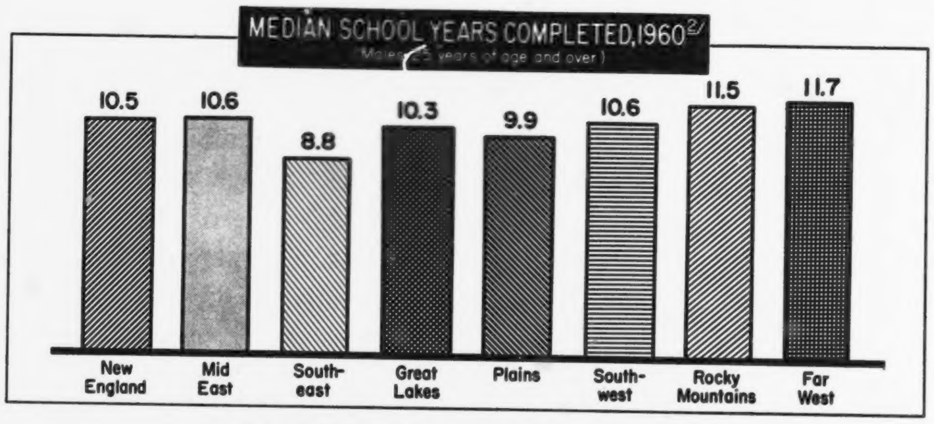
2/ Includes private household workers.

3/ Median years of school completed of employed persons 18 years and over as of March 1967.

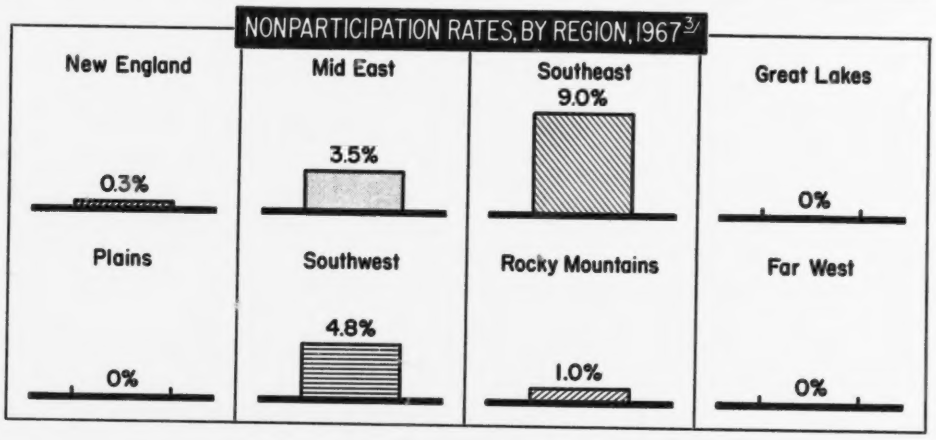
4/ Includes farmers and farm laborers not shown separately whose median years of school completed was 8.9 in March 1967.

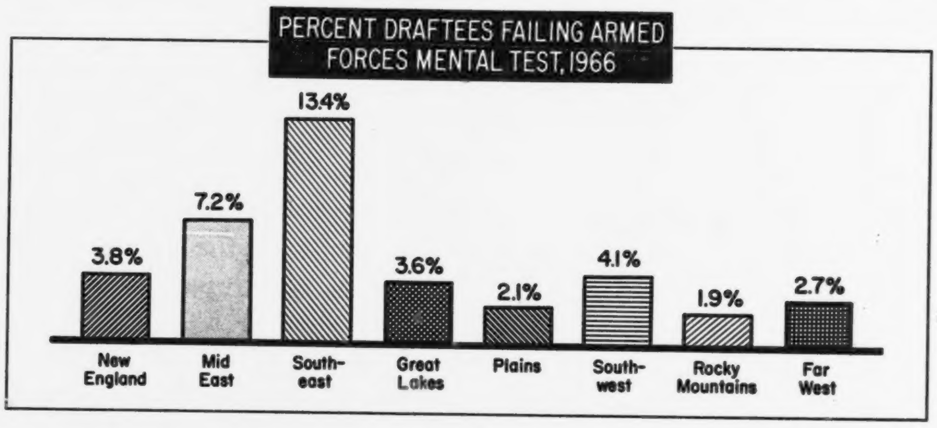
Basic Data: 1968 Manpower Report of the President

AMOUNT OF EDUCATION SHOWS UP IN MENTAL CAPACITY TEST, BY REGION[1]


MEDIAN SCHOOL YEARS COMPLETED, 1960[2]

(Males 25 years of age and over)


NONPARTICIPATION RATES, BY REGION, 1967[3]


PERCENT DRAFTEES FAILING ARMED FORCES MENTAL TEST, 1966

[1] Except for nonparticipation rates, regional data represent unweighted State averages since absolute numbers are not available.

[2] Latest available year.

[3] Percentage of public-school population (age 5 to 17) not enrolled in public schools. Elementary (including kindergarten) and secondary public schools. School year 1966-1967 shown as 1967.

Basic Data: National Education Association; Office of Education, Dept. of H.E.W.; Bureau of The Census, Dept. of Commerce.

III. Getting and Keeping the Kids in School

Nonparticipation rates by age and color

In the previous chapter, reference was made on a regional basis to nonparticipation in public-school enrollment on the part of those aged 5-17 in the public-school population. The serious amounts of nonparticipation in some regions of the country were underscored.

Equally serious, and due in large measure to similar causes, are the nationwide variations in nonparticipation rates by age group and color. The available data on this subject deal with those aged 5-17 who are in both public and private schools, and do not separate the two groups. Clearly, such data understate greatly the gravity of the nonparticipation rates in the public schools, where the rates by age group and color are probably much higher than in the private schools.

As of October, 1966 (later data not available), the nonparticipation rate for all those aged 5-17 throughout the nation was 4.6 percent. But the rate was 4.4 percent for whites, compared with 5.9 percent (or more than one-third higher) for nonwhites. In the elementary schools, the nonparticipation rate averaged 4.4 percent, being 4.3 percent for whites and 5.0 percent (or about one-sixth higher) for nonwhites. In the secondary schools, the rate averaged 6.3 percent, being 6.0 percent for whites and 8.4 percent (or two-fifths higher) for nonwhites.

In the age group 5-6, a very formative period, the nonparticipation rate averaged 14.9 percent, being 14.3 percent for whites and 18.4 percent (or almost 29 percent higher) for nonwhites. Because of mandatory school attendance laws—all but four States require that children attend school when they reach the age of 7 (in some cases, lower), and all but two require attendance until at least the sixteenth birthday—nonparticipation rates are lowest for the age group 7-13, averaging about 0.7 percent for both whites and nonwhites.

However, despite attendance laws, the average nonparticipation rate for the age group 14-15 doubled to 1.4 percent; for the whites it rose to 1.2 percent; and for the nonwhites it more than quadrupled to 2.5 percent (this being more than twice as high as the rate for whites in the same group). And for the age group 16-17, the nonparticipation rate shot fantastically upward, averaging 11.5 percent, and being 11.0 percent for whites and 14.6 percent (or almost one-third higher) for nonwhites.*

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* See chart on page 24.

The much higher nonparticipation rates among nonwhites than among whites are due to a multiplicity of causes. They reflect the higher incidence among the nonwhites of poverty, unemployment, bad housing, a century of discrimination, and other corrosive influences. Conversely, regardless of what the causes may be, the much higher nonparticipation rates among nonwhites operate in high degree to make it more difficult for them to move toward equality on all of these other fronts.

But in the larger sense, the nonparticipation problem and the damage which it does know no color lines. The whole nation pays the cost of unemployment and poverty, nonproductiveness and resentment. Beyond all this, while the rates of nonparticipation are much higher among the nonwhites, they constitute only about one-seventh of the population aged 5-17. Thus, the absolute amount of nonparticipation is enormously higher among the whites, just as the absolute amount of unemployment and poverty, which relate in large measure to educational deficiencies, are enormously higher among the whites.

Quantitative significance of nonparticipation rates

To appreciate even more fully the significance of the facts thus far set forth in this chapter, let us translate these nonparticipation findings into the larger quantifications which they import.

In 1966 (later data not available), there were 6.5 million multiple-person families in the U.S. in which the family head had less than eight years of elementary education, and another 7.8 million in which the family head had not gone beyond eight years of elementary education. This means that there were 14.3 million families, coming to about 53 million people, in which the head had not gotten as far as high school.*

There were 9.0 million families in which the head had only one to three years of high school education, and another 14.7 million in which the family head had not gone beyond high school. Thus, there were 23.7 million families, aggregating about 88 million persons, in which the family head had gone beyond elementary school but not beyond high school.

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* To simplify the presentation without impairing the impact of the discussion, multiple-person family size averaging 3.72 persons (the U.S. average for 1966) is used throughout, although family sizes in fact vary according to income, color, and many other factors.

Meanwhile, there were 4.9 million families in which the family head had enjoyed one to three years of college education, and another 6.0 million in which the family head had enjoyed four or more years of college education, these two groups aggregating only about 41 million people.*

In addition, among unattached individuals, there were 2.4 million with less than eight years of elementary schooling, another 2.5 million with eight years, another 1.8 million with one to three years of high-school education, and another 2.9 million with four years of high-school education: total, 9.6 million. In contrast, only 1.3 million had one to three years of college education and 1.5 million had four years or more of college education.**

Goals for enrollment in public schools, 1967-1977: toward 100-percent participation

The goals for public-school enrollment during the decade ahead derive from two simple factors: (1) estimated increases in the school-age [5-17] public-school population, and (2) the imperative necessity of achieving and maintaining 100-percent participation rates for the public-school population throughout the nation from kindergarten through high school, without exception anywhere, not later than 1977.

For the nation as a whole, this means an increase in public-school enrollment from 43.0 million in 1967 (school year 1966-1967) to 45.7 million in 1977, an increase of 6.3 percent. But because of the widely different nonparticipation rates in the various regions in 1967, the regional rates at which enrollment must increase differ greatly. And full appreciation of this is essential to a mature understanding of the very nature of our public-school problem in the years ahead.

With respect to the eight regions of the United States, the highest rates of enrollment increase are called for in the two regions where nonparticipation is now most serious. In the Southeast region of 12 States, where nonparticipation rates average 9 percent of the public-school population, enrollments in 1977 should be 11.2 million, or 1.3 million (13.9

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* See again chart on page 12.

** See again chart on page 13. In connection with the showing in this chapter as to the portions of our people whose years of schooling have been so inadequate, it may benefit the reader at this point to look again at the relationship between years of schooling and poverty (as depicted on the charts on pages 12 and 13) and the educational requirements imposed by a changing economy (as depicted on the chart on page 16).

percent) above the 1967 level. Within this region, the States which need to raise school participation rates the most are Albama, Kentucky, and South Carolina, where the nonparticipation rates average at least 10.0 percent. Nonparticipation is also relatively high in the Southwest, about 4.8 percent. And due mainly to the need for increased participation, enrollments should reach 4.2 million in 1977, about 400,000 or 9.0 percent above the 1967 level.

In contrast, nonparticipation in most other regions is relatively low; their needed enrollment increases will reflect mainly population growth. In order of the size of the increases in enrollment needed from 1967 to 1977, the regional goals are as follows: In the Mid East, enrollment should rise by 500,000, or 5.4 percent, to 8.3 million. In the remaining five regions, enrollments should rise approximately 100,000 in each. In the Rocky Mountains region, enrollment should rise 4.3 percent to 1.3 million; in New England, enrollment should rise 3.8 percent to 2.3 million; in the Plains region, enrollment should rise 2.7 percent to 3.7 million; in the Great Lakes region, enrollment should rise 2.4 percent to 8.7 million; and in the Far West, enrollment should rise 2.3 percent to 6.0 million.*

Manifestly, these tremendously varying rates of increase will impose tremendously varying burdens upon the different regions. This will be further disclosed in following chapters. The very heart of the entire problem under discussion in this study is to delineate how burdens so disparate in size and weight may be met effectively within the decade—toward the unimpeachable goal of equality of educational opportunity and performance in our public schools throughout the nation.

Enough classrooms for all: numerical needs

The importance of achieving the goal of only 12 pupils for each member of the instructional staff by 1977 represents a vital need that cannot be overemphasized too strongly. Meanwhile, teachers and other educational personnel cannot carry out their jobs effectively, nor can pupils thrive, in schools characterized by overcrowding or by outmoded or dilapidated facilities. Toward providing equal education to all in the public schools, it is imperative that physical plant facilities be expanded and upgraded. No pupil should be deprived of safe, modern, and up-to-date schoolrooms and equipment.

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* See chart on page 25.

Consistent with the other goals set forth in this study, the available supply of public-school classrooms should rise from 1,653,455 in 1967 to 2,285,000 in 1977, an increase of 32.8 percent. This calls for construction of 1,231,545 new classrooms during the 10-year period 1968-1977 inclusive, to meet the combined requirements of rising enrollment, reduced classroom size, adjustments for migration or abandonment, and eliminating unsatisfactory conditions.

Of this total construction program, about 632,000 classrooms—51 percent—are needed to take account of growing enrollment and to reduce classroom size from the current average of 26 pupils per classroom to the acceptable ratio of 20 to 1.*

In addition, 366,000 classrooms should be built to adjust for abandonment or migration (including school-district reorganization), and 234,000 should be built to eliminate unsatisfactory conditions such as offsite, nonpermanent, improvised, or makeshift classrooms, and rooms with three or more defects.

Because enrollment growth in our public schools is projected to taper off somewhat in the later half of the 1967-1977 period (assuming that the lower birthrates of 1966 prevail), the need for new classroom construction will be greatest in the years immediately ahead, averaging 134,000 units per year during 1968 and 1969 (of which 55 percent should be for increased enrollment and reduced class size), but slowing down to 127,000 per year during 1970 and 1971, and to only 115,000 per year during 1972 through 1975. During 1976 and 1977 classroom construction should pick up somewhat, to about 125,000 per year.

Capital needs

Providing these new classrooms will require capital outlays totaling $66.5 billion during the 10 years 1968-1977 inclusive, or an annual average of $6.7 billion (based on an average cost of $54,000 per room in 1967 dollars). Again, due largely to a higher rate of enrollment growth in the public schools in the first half of the 10-year period, capital outlays for classroom construction should average annually $7.3 billion for 1968 and 1969 (compared with $4.0 billion in 1967), but would not be as high in the remaining years, averaging annually $6.9 billion per year during

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*The 1977 goals contemplate both a pupil-classroom and a pupil-teacher ratio of 20 to 1, while in 1967 the pupil-classroom ratio was 26 to 1 and the pupil-teacher ratio 24 to 1.

1970 and 1971, $6.2 billion during 1972-1975, and $6.7 billion during 1976 and 1977.

These goals for capital outlays involve outlays aggregating $1,463 per pupil during the 10-year period 1968-1977, inclusive, averaging annually $146 per pupil. Compared with 1967, when capital outlays averaged only $93 per pupil, the projected levels would average $164 during 1968 and 1969, $151 during 1970 and 1971, $135 during 1972-1975, and $147 during 1976 and 1977.*

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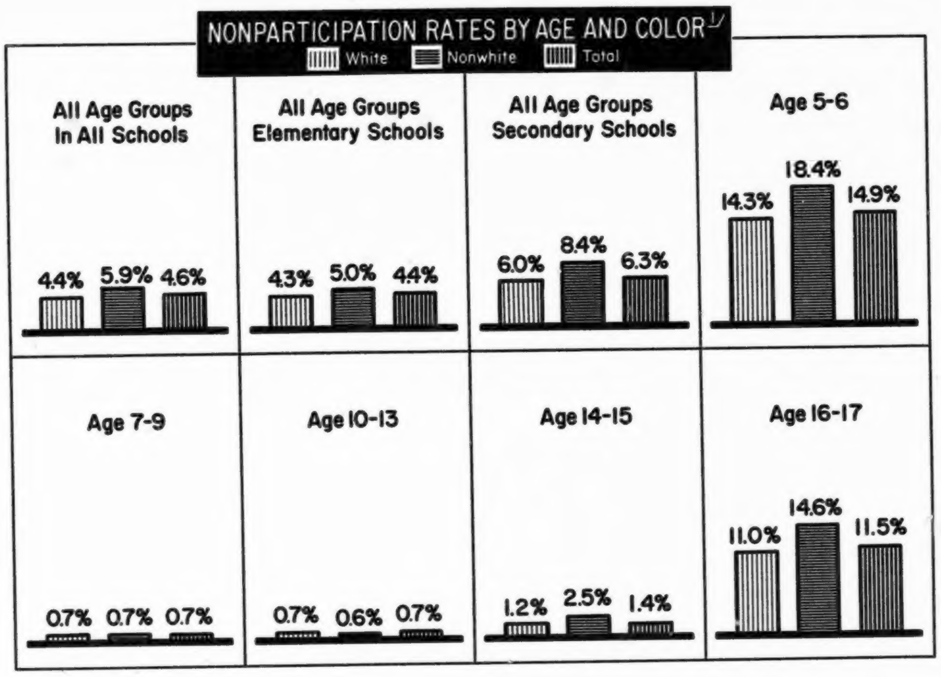
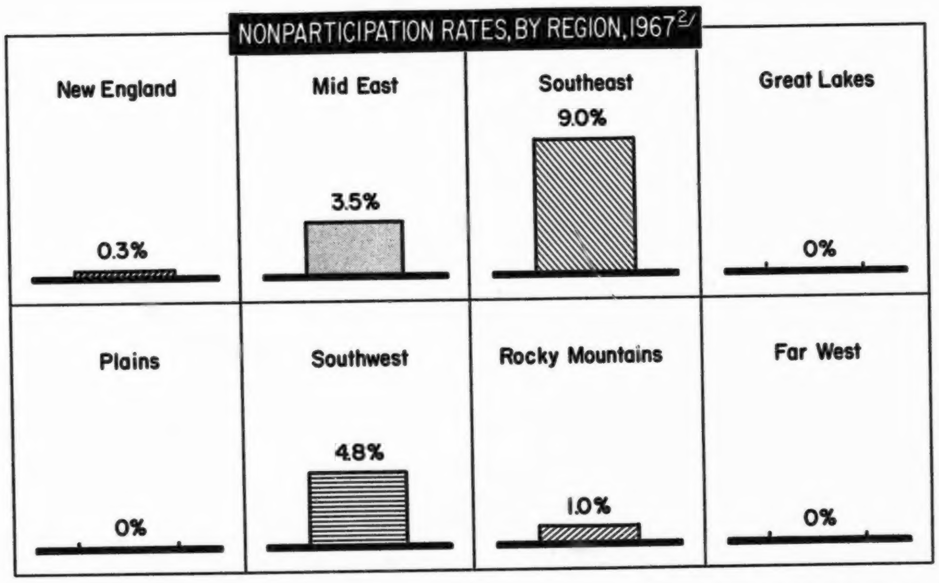
* See chart on page 26.

PERCENT OF SCHOOL AGE POPULATION NOT ENROLLED IN SCHOOL

(Nonparticipation Rates)





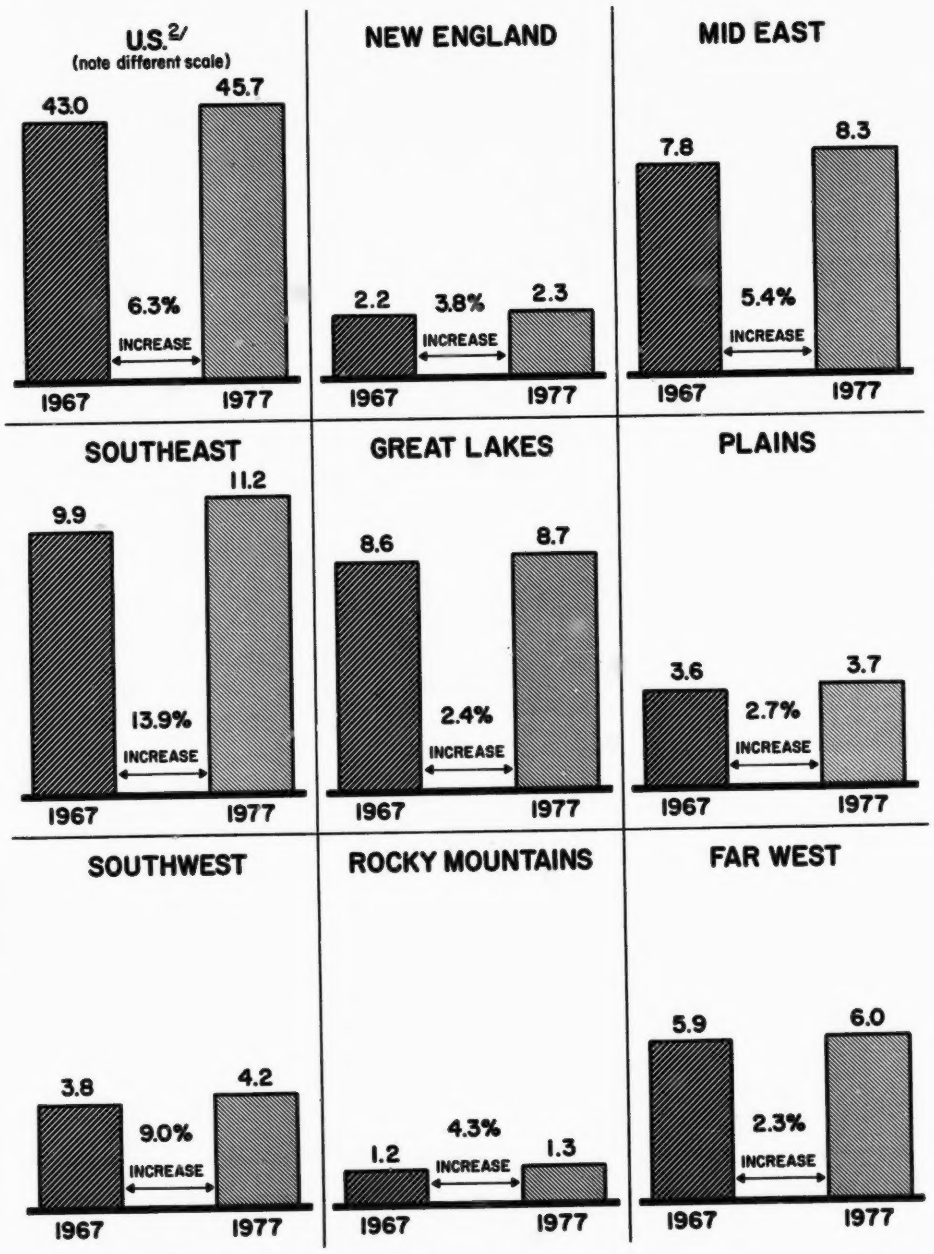
[1] As of October, 1966. Percentage of population age 5–17 not enrolled in either public or private schools. Nonparticipation rates in public schools not available for detailed age-color groups shown.

[2] Elementary (including kindergarten) and secondary public schools. School year 1966–1967 shown as 1967.

Source: National Education Association; Office of Education, Dept. of H.E.W.; Bureau of the Census, Dept of Commerce

ENROLLMENT IN PUBLIC SCHOOLS, 1967 AND GOALS FOR 1977[1]

(Millions)



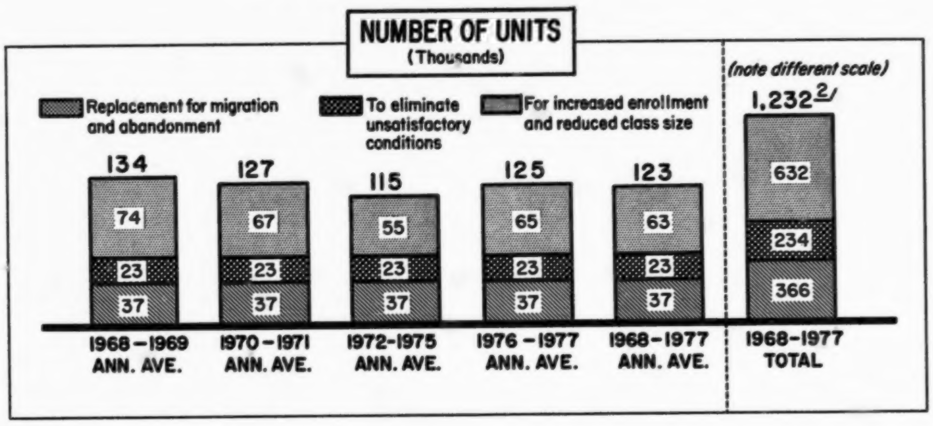
[1] Elementary (including kindergarten) and secondary public schools. School year 1966-1967 shown as 1967, etc. Goals based upon nationwide enrollment rate of approximately 100% by 1977, for school-age population (5 through 17 years) not in private schools.

[2] 50 States and D.C.

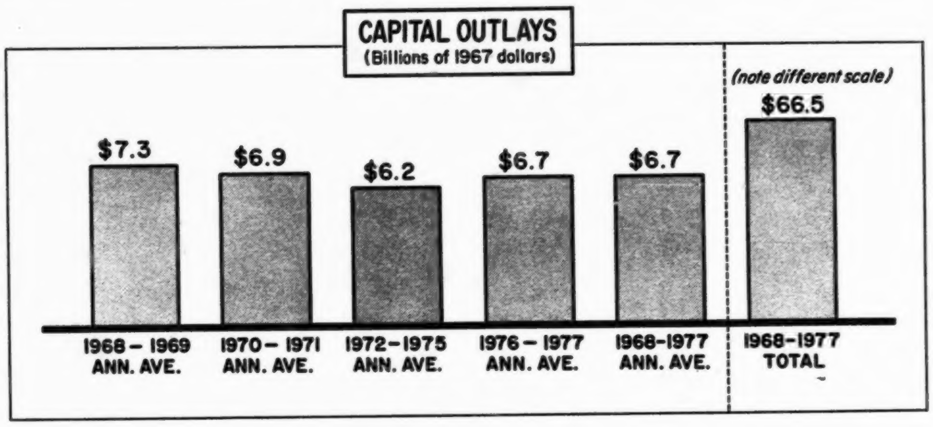
Note: Percent changes based on unrounded numbers.

Basic Data: National Education Association; Office of Education, Dept. of H.E.W.

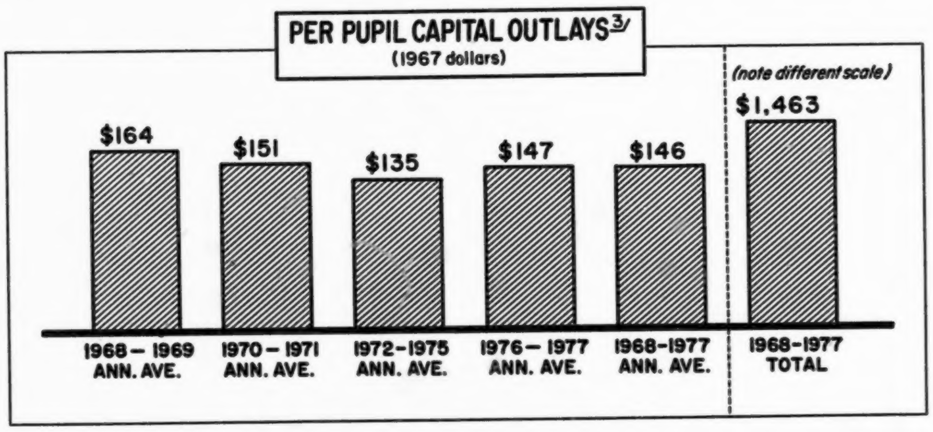
U.S. PUBLIC SCHOOL CLASSROOM CONSTRUCTION GOALS FOR 1968-1977[1]



NUMBER OF UNITS
(Thousands)



CAPITAL OUTLAYS
(Billions of 1967 dollars)



PER PUPIL CAPITAL OUTLAYS[3]
(1967 dollars)

[1] 50 States and D.C. Elementary (including kindergarten) and secondary public schools. 1968 refers to school year 1967-'68, etc.

[2] Total construction of 1,231,545 classrooms, 1968-1977, would increase available supply (allowing for elimination and replacement) from 1,653,455 in 1967 to 2,285,000 in 1977.

[3] Enrollments rising from 42,986,514 in 1967 to 45,715,000 in 1977.

Basic Data: Office of Education, Dept. of H.E.W.; National Education Association

IV. Staffing the Schools: Teachers and Others

There is no one simple or pat explanation of why our public schools are in trouble and have been running downhill, why they have not been able to do nearly enough for the pupils who remain in school nor hold those who leave before they should. A large part of the explanation, as already indicated, is the stultifying economic and social environment in which millions of families with children of school age live. The schools themselves cannot be blamed for all the ills of the nation. But a very large part of the trouble is located within the schools themselves. They are not now what they should be, nor what we can and must make them.

The quest for excellence in the public schools runs across the whole gamut of educational problems. Many of these problems, while critical, are beyond the scope of this study. They include, among others, pedagogical methods and the nature of the curriculum. But the first and foremost step toward an effective attack upon any or all of these problems is to remedy the insufficient supply of teachers, the inadequate training of many of them, and the unjustifiably low pay which interpenetrates with the other factors bearing upon their supply and performance.

Goals for the supply of classroom teachers, 1967-1977: national perspective

Reflecting previous increases in the school-age population, and, more significantly, enlightened awareness by the public of the importance of education, demand for elementary and secondary school teachers has grown dramatically. From 1957 to 1967 (school years 1956-1957, etc.) the number of public elementary and secondary school teachers rose from 1,199,000 to 1,788,105, an increase of about 589,000 or 49 percent.

During the next decade, still more teachers will be needed, but because of a projected slowdown in population growth—specifically among the school-age population [5-17] due to assumed lower fertility rates—the demand for additional teachers will not be as pressing as in the previous 10-year period. Nonetheless, the nation as a whole will continue to need more teachers, not only to cover enlarged enrollments, but also to lower very considerably the pupil-teacher ratios. By 1977, there should be 2,286,000 teachers employed in our public elementary and secondary school systems—500,000, or 27.8 percent, more than currently. The goal involves the concept of fully accredited persons serving as teachers; it does not include those fully accredited to teach but in fact doing other types of work within the school system, nor does it contemplate service as teachers by those not fully accredited.

Although this projected increase in needs is slightly less (by about 15 percent) than the rise from 1957 to 1967, we should not be complacent about the ease of meeting these future requirements. To the extent that salaries of teachers continue to lag behind both the increase in nationwide productivity and the incomes of other comparable groups (as will be made abundantly clear later on), and to the extent that potential teachers might enter more lucrative lines of work, we could be faced with increasingly serious shortages of teachers in the public schools.

Regional goals

The teacher-supply goal is aimed toward a nationwide pupil-teacher ratio of 20 to 1 in 1977, compared with 24 to 1 in 1967. And since the broader goal which animates the entire study is the equalization of educational opportunity and performance throughout the land, the 20 to 1 objective is not only a goal for the nationwide average, but also for each region and for all the States within that region.

In 1967, the pupil-teacher ratio ranged from 22 to 1 in the Plains region to 25.8 to 1 in the Far West, and of course was much higher in some States and many localities. However, considerable flexibility and discretion is envisaged within this general standard. It does not imply precisely the same ratios for all classes, regardless of the age of the pupils, the subjects taught, or other conditions in the area where a particular school may be located. For example, even lower ratios—perhaps on the order of 10-15 pupils per teacher—might be desirable in disadvantaged neighborhoods where special teacher attention is required to elevate and accelerate education for deprived youngsters and bring them up to par with others.

The general goal of equalization by 1977 will impose tremendously different burdens on different regions, for much (but not exactly) the same reasons that the rates of increases in enrollment will need to be tremendously different in different regions.

In both relative and absolute terms, the States in the Southeast will need by far the largest net increase in the number of teachers. The facts on this illustrate clearly how much heavier the burden will be in some regions and States than in others. The 12 States in the Southeast will need 177,894 more, or 43.7 percent more, teachers in 1977 than in 1967 (and will need to recruit several times this number over the decade to take care of replacements as well). The net increase, comparing 1977 with 1967, will account for more than one-third of the needed nationwide net increase of about 500,000. This large net increase in the Southeast reflects mainly (1) the relatively high pupil-teacher ratio in this region, averaging 26 to 1 in 1967, which needs to be reduced to 20 to 1 by 1977, and (2) the substantial increase in enrollment required to eliminate by 1977 the 9.0 percent nonparticipation rate (the highest among all the regions). These two factors (related entirely to achieving the minimum standard of excellence by 1977) account for 159,787 of the total net increase of teachers needed in the Southeast. The remainder of the needed net increase, 18,107, would reflect the increase in the school-age population.

Demand will also be substantial in the Far West including Alaska and Hawaii, where about 75,000 net additional teachers (32 percent) will be needed, reflecting both the heavy concentration of population in this region—especially California—and reduction of the pupil-teacher ratio from the current 26 to 1.

To a lesser extent, a similar situation seems to exist in the four Southwestern States of Arizona, New Mexico, Oklahoma, and Texas, where about 31 percent net additional teachers will be required in 1977, compared with 1967. However, because these States are less populated than others, the number of teachers needed will amount to about only 50,000 more in 1977 than in 1967.

In contrast, employment growth for teachers will be relatively less rapid than for the country as a whole in New England (16 percent increase), the Mid East (17 percent increase), and the Plains region (13 percent increase). That the demand for teachers in these regions will increase at a rate less than the national pace seems to be largely a function of enrollment growth, although it is also true that existing pupil-teacher ratios in these regions are lower than the national average.*

Consistent with these projections, the total recruitment of new classroom teachers needs to proceed at a rate which will result in an average annual rate of recruitment of 215,229 during the 10 years 1967-1976 inclusive, or a total recruitment of 2,152,288 over the 10 years. This represents (1) an annual average increase of 49,700 new positions to meet enrollment increases, and the reduction of the pupil-teacher ratio to 20 to 1 by 1977, and (2) an average annual recruitment of 165,529 replacements to take care of an average annual teacher turnover in the neighborhood of 8 percent a year, and replacement of an estimated one-third of 90,500 insufficiently qualified teachers as of 1966 (the other two-thirds of whom should be brought up to satisfactory standards by various methods insofar as they are not within the 8 percent turnover).

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* See chart on page 47.

The size of this recruitment task is indicated by the fact that the average annual recruitment of new teachers during the five-year period 1962-1966 inclusive was only 192,117. But this is only a partial indication of the difficulty of the task ahead. For one thing, the recruitment in the years ahead must be accompanied by more vigorous quality standards than have been applied to date. In addition, account must be taken of the enticement away from teaching by other professions and occupations, which thus far have been permitted to enjoy a large advantage over teachers in the public schools in terms of pay.*

More paraprofessionals and others

Classroom teachers make up the vast majority of instructional personnel in our public elementary and secondary schools—90 percent in 1967. But there is a great need for increased personnel, in addition to fully accredited persons serving as teachers, to carry out ancillary school duties. Among these are fully accredited principals, supervisors, librarians, guidance and psychological personnel (referred to in this chapter as Group One), and persons assisting fully accredited teachers in instructional functions (referred to as Group Two).

With respect to Group One—especially school social workers, psychologists, nurses, speech-and-hearing specialists, and guidance counselors—personnel shortages are acute. This is likely to remain a severely limiting factor, unless rates of training and proper incentives are greatly increased, with special emphasis on preparation for work with disadvantaged children and youth.

But numerically at least, and perhaps in other respects also, the greatest need is for immense expansion of Group Two.**

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* See chart on page 48.

** The term nonteacher instructional staff, as used in this chapter, excludes individuals engaged in administration, operation, and maintenance of plant facilities, and other noninstructonal personnel such as school aides. These persons are embraced in "other current outlays" in Chapter V.

Numerical goals for total nonteacher instructional staff

All told, in 1967 there were only about 188,000 nonteacher instructional personnel in our public schools, or about one for every 229 pupils. It seems obvious that their effectiveness is hampered because of the very large number of pupils each must serve on the average. The adverse impact upon the pupils themselves is equally obvious. These staff deficiencies must be rectified, through engaging more persons to (1) bring workloads into more reasonable alignment with existing and growing enrollments, and (2) permit specialized personnel, in conjunction with classroom teachers, to meet the challenge confronting the public-school system.

To fulfill these objectives, this study projects an over-all pupil-instructional staff ratio of 12 to 1 by 1977. With 45.7 million enrolled in public elementary and secondary schools by 1977, this would create the need for a total instructional staff of 3,808,000 in that year. With 2.3 million fully accredited persons serving as teachers (in order to achieve the goal of 20 pupils per teacher discussed earlier), 1,523,000 would represent nonteacher instructional personnel, averaging one for every 30 students.

Numerical goals for Group One

Employment within Group One as defined above should rise from an estimated 188,000 in 1967,* to 381,000 in 1977, an increase averaging annually 19,300, or 7.3 percent. The average annual rate of increase should be 9.5 percent from 1967 to 1970 (247,000 in that year); 7.2 percent from 1970 to 1972 (284,000 in that year); and 6.1 percent from 1972 to 1977. The goal for 1977 is based on the judgment of educational experts that a ratio of 1 Group One personnel to 6 teachers (contrasted with fewer than 1 to 10 in 1967) represents a sound target, enabling both teachers and other instructional personnel to carry out their functions efficiently.

Numerical goals for Group Two

With respect to Group Two (persons assisting fully accredited teachers in instructional functions), employment should increase at a rate much faster than for either teachers or other instructional personnel. By 1977, this Group One should rise to 1,142,000, based on achieving a ratio of

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* The estimate for 1967 probably includes a small number of personnel included in Group Two, but available data do not permit a separate breakdown for that year.

1 to every 2 teachers. Realization of this numerical goal implies an enormous rate of growth in such personnel, rising from a nominal level in 1967 to 159,000 in 1970; increasing 46 percent each year from 1970 to 1972 (to 338,000); and increasing 28 percent annually for the next five years (to 1,142,000 in 1977).

The rapid growth of this second group has profound implications. It will help to relieve the workloads of teachers, permitting them to devote more time to teaching as such. It will provide a source of new jobs for many individuals (more than a million more over the decade) lacking the credentials for higher-rated jobs. Yet these are not "deadened" jobs; there appears to be a considerable career potential for these individuals, through working up into the professional ranks with the aid of supplemental training and education.*

Increasing salaries

Having demonstrated that we need more teachers in our public schools, and better ones in some cases, the next question is: How do we get them? The core approach, although there are others of a secondary nature, can be put into eight plain words: Let us start to pay the teachers decently.

This direct and unequivocal statement may arouse the ire of those who say that "money is not the answer to everything," by which they mean "except in my case." It may evoke the refrain that the noble teaching profession should rise fully to its heartwarming responsibilities toward the young of the nation, and that if it does not do this without decent pay, it will never do it anyway. But to whom else is this hypocritical comment addressed? Is it told to the doctors, also a noble profession?

Rather than dwell further on these types of arguments, it will serve the nation and the young better to examine the realities of teachers' pay.

Inadequate teachers' pay: the Moderate Standard of Living Budget

A first test of the painful inadequacy of teachers' pay today is to be found in the Moderate Standard of Living Budget prepared as of Autumn, 1966, by the Bureau of Labor Statistics in the U.S. Department of Labor, and adjusted in the current study to February, 1967 (the mid-point of the 1966-1967 school year), by use of the Consumer Price Index. There are separate Moderate Standard of Living Budgets for metropolitan areas with populations of 50,000 and over and nonmetropolitan areas with populations of 2,500-50,000.

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* See chart on page 49.

The average annual salary of teachers in the public schools throughout the U.S. was $6,830 in 1967 (school year 1966-1967). This was 27.4 percent below the Metropolitan Area Budget of $9,404 for a four-person family, and 18.1 percent below the $7,704 Budget for a three-person family. It was 18.6 percent below the Nonmetropolitan Area Budget of $8,391 for a four-person family, and 0.7 percent below the $6,881 Budget for a three-person family.

The average salary of teachers in the public schools in the 10 largest cities was $7,810 in 1967. This was 17.0 percent below the Metropolitan Area Budget for a four-person family, and only 1.4 percent above the Budget for a three-person family.

On a regional basis, the highest average annual salary for teachers in the public schools in 1967 was $8,154 in the Far West. This was 13.3 percent below the Metropolitan Area Budget for a four-person family, and 5.8 percent above the Budget for a three-person family. It was 2.8 percent below the Nonmetropolitan Area Budget for a four-person family, and 18.5 percent above the Budget for a three-person family.

The Southeast in 1967 had the lowest average annual salary for teachers in the public schools, $5,797. The significance of this is especially great, in that this region has the largest number of teachers and the largest enrollment in the public schools, and also the highest pupil-teacher ratio. This average salary was 38.4 percent below the Metropolitan Area Budget for a four-person family, 24.8 percent below for a three-person family, and only 2.8 percent above for a two-person family. It was 30.9 percent below the Nonmetropolitan Area Budget for a four-person family, 15.8 percent below for a three-person family, and 15.1 percent above for a two-person family. It should also be noted that it was 46.8 percent below the Metropolitan Area Budget for a five-person family, and 57.7 percent below for a six-or-more person family; it was 40.0 percent below the Nonmetropolitan Area Budget for a five-person family, and 52.7 percent below for a six-or-more-person family.

In descending scale, the average annual pay of teachers in the public schools in 1967 was $8,154 in the Far West, $7,475 in the Mid East, $7,096 in the Great Lakes region, $7,087 in New England, $6,377 in the

Rocky Mountains region, $6,202 in the Plains region, $6,089 in the Southwest, and $5,977 in the Southeast. The variations are startling. The highest average salary (in the Far West) was 40.7 percent higher than the lowest average (in the Southeast). The average in the Far West was 4.4 percent higher than the average in the 10 largest cities. The average in the Mid East was 28.9 percent higher than the average in the Southwest, and 20.5 percent higher than the average in the Plains region. The average in the Southeast was 15.1 percent below the nationwide average, while the average in th Far West was 19.4 percent above the nationwide average.

Some specious objections may be raised against the foregoing analysis. One may be that the cost of living is not the same throughout the nation. But the adjustments to regional variations in the cost of living would not appreciably change the fundamental significance of the regional disparities. Another objection may be that families in many instances have more than one breadwinner, and that comparing the pay of a teacher with a family Budget standard fails short. Granted that considerable allowance should be made for this observation, it is by no means as compelling as might seem at first glance.

In the first place, a breadwinner who happens to be a teacher in the public schools should be paid enough to support a family of reasonable size. Perhaps family planning should be related in some ways to income, but unfair income treatment as a deterrent to family formation or family size is on all grounds undesirable. And in many instances, secondary workers who should not be at work or should be at school are forced into jobs, often at substandard pay, because of the inadequate income of the principal breadwinner.

It may be argued that more than two-thirds of the teachers in the public schools are women, and that this operates against the proposition that the teacher should earn enough to support a family. But many women who are teachers do support families. And if a male teacher should earn enough to support a family, what about equal pay for equal work? Besides, men are more than 53 percent of all teachers in the secondary public schools. In short, the apologetic argument on grounds of sex really boils down to the fact that teachers have been so grossly underpaid just because the majority of them are women, and that this should continue to be an excuse for paying teachers less than they are worth.

In the second place, it is revealing to adjust the data on teachers' pay to the assumption that -there is more than one breadwinner in the family. By way of example, let us apply this exercise to the Southeast, where teachers in the public schools are the most numerous and their pay the lowest. If the income of a family in the Southeast were two-thirds higher than the average pay of the teachers in the public schools there, the family income would be 12.8 percent below the Metropolitan Area Budget for a five-person family, and 42.0 percent below for a six-or-more-person family. It would be 0.7 percent below the Nonmetropolitan Area Budget for a five-person family, and 26.8 percent below for a six-or-more-person family. If the family income were 50 percent above the average annual teacher's salary, it would be 7.5 percent below the Metropolitan Area Budget for a four-person family, 20.2 percent below for a five-person family, and 36.6 pecent below for a six-or-more-person family. It would be 10.7 percent below the Nonmetropolitan Area Budget for a five-person family, and 29.0 percent below for a six-or-more-person family.*

Comparisons of starting salaries of teachers with those of others

In 1968 (school year 1967-1968), it appears that the average annual starting salary of teachers in the public schools throughout the U.S. was $5,523 for those with bachelor's degrees, and $6,065 for those with master's degrees. In the 10 largest cities, the averages were $6,096 and $6,606, respectively. How did these salaries compare with the starting salaries of males in other professions on a nationwide average basis, for those starting work after June, 1967? The professions examined, in the order of ascending pay scales, are: liberal arts, production management, business administration, mathematics-statistics, economics-finance, chemistry, sales-marketing, and engineering.

Comparing those with bachelor's degrees, the teachers throughout the nation averaged from 18.5 percent below those in the liberal arts, at $6,780, to 35.4 percent below those in engineering, at $8,544. Among those with master's degrees, the teachers throughout the nation averaged 27.6 percent below those in the liberal arts, at $8,376, and 39.5 percent below those in engineering, at $10,020.

The teachers with bachelor's degrees in the 10 largest cities averaged 10.1 percent below those in the liberal arts, and 28.7 percent below those in engineering. The teachers with master's degrees in the 10 largest cities averaged 21.1 percent below those in the liberal arts, and 34.0 percent below those in engineering.*

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* See chart on page 50.

The types of familiar tests thus far discussed, essentially equitable or social in nature, indicate strongly that large increases in teachers' pay are eminently desirable and urgent. But some other tests, more intrinsically economic in nature, will now be discussed.

General principles for productivity-wage-salary adjustments

The most widely if not universally accepted principle bearing upon increases in wages and salaries is that these increases should comport with the nationwide average of productivity gains (increases in output per man-hour worked) in the U.S. private economy as a whole. This principle was embodied in the Price-Wage Guidelines promulgated in recent years in the Economic Reports of the President and developed with the assistance of the Council of Economic Advisers. The breakdown and virtual abandonment of these Guidelines did not result from the invalidity of the general principle, but rather for a variety of other reasons which need not be discussed in this study. It is generally sound that the average earnings of wage and salaried employees throughout the nation should increase apace with the nationwide average productivity gains, for this encourages the balanced expansion of our ability to produce and our ability to consume.

It should be stressed, especially because there is much confusion on the subject, that the average increases in wages and salaries per employee must keep pace *in terms of real purchasing power* with the nationwide average productivity gains. Otherwise, the core purpose of the principle itself is defeated. If the productivity gain is 3 percent, to take an arbitrary example, the average of wage and salary increases per employee should go up 3 percent in dollars *if* the cost of living remains stable. But if the cost of living has gone up by a given amount, the wage or salary increase should include both the productivity gain and an appropriate allowance for the increase in the cost of living, so that the wage and salary increase in terms of real purchasing power equals the productivity gain.

It may well be—and indeed the author of this study believes—that the Guidelines were defective in attempting to relate the nationwide average of productivity gains to wage adjustments in each industry, regardless of whether productivity gains in that industry were much greater than the nationwide average productivity gain. The very nature and philosophy of our economic system are inconsistent with uniform increases in pay throughout, especially when we do not have and would not want a similar uniformity in profit performance or allowability throughout. When workers in industries where the productivity gains are very far above the nationwide average receive wage-rate increases approximating nation-wide productivity gains, this results (in the absence of appropriate price reductions, almost never undertaken) in excessive and exacerbating profits in these industries, and is not conducive to economic balance. To be sure, we must find ways of encouraging nationwide average gains in wages and salaries roughly approximating the nationwide average productivity gains. But this will not result from attempting to impose a straightjacket upon wage developments throughout the entire economic system. Of course, we do so to a degree in total war, but that provides no model for now or for the foreseeable future.

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* See chart on page 51.

Specific applicability of productivity gains to teachers salaries

Quite consistent with what has been said above, the nationwide average of productivity gains in the private economy is the best available criterion for salary increases for teachers, especially public-school teachers, and those engaged in many other types of services. This was fully and correctly recognized, in theory at least, by the Price-Wage Guidelines. One main reason for this is that the productivity of the teacher and many other types of employees performing services cannot be measured with the mathematical precision which is feasible in the case of many types of industrial workers.

It is sometimes insisted, despite the unavailability of precise measurements, that the productivity of those in many of the services, and especially in the publice services, has not increased as rapidly as the average productivity gains in the private economy at large. This argument is entirely erroneous, in addition to being antisocial and inequitable. The product of the teacher is the education of the child, and in an economic sense the value of educating a child increases in line with the average nationwide increase in the economic value of those who eventually move from formal education to gainful employment. Educating a child in 1969 has more economic value than educating a child in 1949, because people employed today are so much more productive than they were 20 years ago. And this is still another reason why the annual average increase in productivity gains throughout the private economy is an entirely appropriate standard for the development of pay policy for teachers in the public schools.

Recent record of productivity gains, actual and potential

The actual average annual rate of productivity gain throughout the private economy is determined in large measure by investment in technological progress, advances in the skills of employees, and improvement in managerial talent. But this actual rate of gain is also determined by the condition of the economy. If the economy is suffering from substantial economic slack, all empirical observation shows that the actual rate of productivity gain is considerably lower than the potential gain which would be translated into reality if the economy were operating at optimum use of resources.

To adjust wage and salary policy to the actual productivity gain rather than to the gain in the productivity potential, when there is a large gap between the two, is a serious error in economic policy. Such error tends to compound and aggravate, rather than to relieve and remove, the basic causes for the deficient economic performance. Wage and salary adjustments in line with the gains in the productivity potential help to cure the imbalances which cause inadequate economic performance, and thus help to lift actual productivity gains toward the gains in the productivity potential.

To illustrate: The average annual rate of growth in output per manhour or productivity for the entire U.S. private economy was 0.4 percent during 1910-1920; 2.3-2.4 percent during 1920-1940; and 3.2 percent during 1940-1955. It fell to 2.4 percent during 1955-1960, in consequence of the two economic recessions and the very low average annual rate of real economic growth during this period. Under conditions of relatively high real economic growth during 1961-1966, the average annual growth rate in productivity was 3.7 percent, indicating resumption of the long-term trend toward an *accelerating* rate of productivity growth. But in 1966-1967, when the rate of real economic growth dropped suddenly to only about one-half of what it had averaged during 1960-1966, the productivity growth rate fell drastically to 1.6 percent.

Viewing the 3.2-percent actual average annual rate of productivity growth during 1940-1955, and the long-term tendency toward acceleration under conditions of reasonably full resource use, it is extremely conservative to estimate that the average annual growth rate in the productivity potential was at least 3.2 percent during 1947-1955. The extraordinarily conservative nature of this estimate is underscored by the fact that the actual average annual growth rate in productivity was 4.0 percent during 1947-1953.

And viewing the actual average of 3.2 percent during 1940-1955, 4.0 percent during 1947-1953, and 3.7 percent during 1961-1966, despite large economic slack in some years, it is also extremely conservative to estimate that the average annual rate of growth in the productivity potential during 1955-1967 was at least 3.5 percent, and in all probability much higher. Certainly, looking at the trends towards acceleration in the growth rate under reasonably good economic conditions, and the actual rates of growth during 1947-1953 and 1960-1966, it is reasonable to maintain that from 1967 forward the average annual growth rate in the productivity potential should not be less than 4.0 percent.*

Teachers pay has lagged lamentably behind productivity gains

Let us now look at what has been happening to the salaries of the teachers in our public schools during the period 1961-1967 (school years 1960-1961 through 1966-1967). This is an appropriate period to use, because it was early in this period that the Guidelines embodying the general principle of relating pay adjustments to nationwide average productivity gains were first promulgated.

Compared with an average annual increase in productivity gains throughout the private economy averaging 3.2 percent, and a gain in the productivity potential averaging at least 3.5 percent, the average annual salary of public-school teachers throughout the nation (measured in 1967 dollars to indicate *real* gains) increased at an average annual rate of only 2.7 percent.

In the 10 largest cities, the average annual salary of public school teachers increased at an average annual rate of only 1.6 percent.

In the Plains region, the salary gains of the teachers, similarly expressed, fell far short of the 3.5 percent average annual gain in the productivity potential, but did equal the 3.2 percent average annual gain in productivity throughout the private economy. In the seven other regions, the salary gains of the teachers lagged behind the 3.2 percent figure, in all regions save one seriously behind it, and in six regions egregiously behind it. Specifically, average annual gains in teachers' salaries in the public schools (all measured in 1967 dollars to show real gains) were 2.8 percent in New England, 2.3 percent in the Mid East, 3.1 percent in the Southeast, 2.2 percent in the Great Lakes, 3.2 percent in the Plains region, 2.4 percent in the Southwest, 2.6 percent in the Rocky Mountains region, and 2.5 percent in the Far West.

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* See chart on page 52.

The foregoing data understate the lag, because of the factor of compounding. The 3.5-percent average annual increase in the productivity potential comes to 22.9 percent in six years; the 3.2-percent average annual increase in actual productivity comes to 20.8 percent; the 2.7-percent nation-wide average gain in teachers' salaries comes to only 17.3 percent, the 1.6-percent average salary gain for teachers in the 10 largest cities comes to 10.0 percent; and the 2.2-percent average salary gain for teachers in the Great Lakes region (where the rate of increase was lowest among th regions) comes to 14.0 percent. And the lag in teachers' pay is further understated, because focus upon the period 1961-1967 neglects the lag in earlier years when most of our present teachers were already teaching.*

Goals for teachers' salaries in the public schools, 1967-1977

The method used in determining appropriate goals for teachers' salaries in our public schools through 1977 is as follows:

Based on the nationwide growth in the productivity potential at an average annual rate of 3.5 percent during 1961-1967 (discussed above), teachers' salaries measured in 1967 dollars should have risen from a nationwide average of $5,215 in 1961 to $7,236 in 1967 (school year 1966-1967). This is $406, or 5.9 percent, above the actual 1967 nationwide average of $6,830.

This result is extraordinarily modest, in that the projection starts with the base year 1961. For example, if it started with the base year 1939 (when many of today's teachers were already teaching), application of the 3.2-percent average annual growth rate in the productivity potential during 1939-1955, and 3.5 percent during 1955-1967, would have lifted the nationwide average salary of teachers in the public schools, measured in 1967 dollars, from $3,463 in 1939 to $8,665 in 1967, or 26.9 percent above the actual 1967 nationwide average of $6,830. Moreover, even this would represent only fully adequate pay *in 1967,* and would not make up one penny of the cumulative deficiencies in pay for all the years from 1939 to 1967.

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* See chart on page 53.

But even starting with the $7,236 nationwide average salary in 1967 which would have resulted from applying productivity gains only from 1961 forward, teachers' salaries should advance 4.0 percent annually from that base figure in 1967. This 4.0 percent represents the estimated average annual gain in the productivity potential from 1967 forward (see above discussion). On this basis, the appropriate nation-wide average annual salary for teachers in the public schools should have risen to $7,525 in 1968 (10.2 percent above the actual 1967 average), and should rise to $8,139 in 1970 and $10,711 in 1977. The average annual rate of increase would be 6.0 percent during 1967-1970, and 4.0 percent during 1970-1977*

Regional and State application of the salary goals

The goal for each region, and for each State within each region, is to reach at least the same $10,711 figure by 1977, in accord with the essential principle of equalization. This goal, representing as it does an average for all teachers, is not inconsistent with considerable diversity within the average. It is not even necessarily inconsistent with the idea that there might be justification in some cases for lower averages in localities where the cost of living is really much lower than elsewhere, although in the main the so-called lower *cost* of living really reflects a lower *standard* of living.

But, as earlier indicated, variations in the cost of living from region to region or from State to State are not sufficient to justify, particularly looking a decade ahead, any attempt to set different goals for different regions and States. Such an undertaking would be highly speculative and hypothetical; more important, it would sacrifice the great goal of equalization on the altar of pretentious efforts to work out excessive and illusory refinements.

Further, in some areas or localities where the cost of living may be somewhat lower than the nationwide average, the somewhat higher purchasing power which would result from uniform salary scales for teachers might help to improve the distribution of teachers throughout the nation. It might well do this by compensating for some of the other disadvantages (real or fancied) faced by those living and working in areas or localities where the cost of living is really significantly lower.

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* See chart on page 54.

Just as in the case of the goals for enrollment and for additions to the number of teachers, the goal of equalization of teachers' salaries by 1977 places immensely varied burdens upon the different regions and upon the several States within them.

In the Southeast (the region where teachers' salaries are now the lowest and where the number of enrollments and teachers are now the highest), the rise in the average annual salary of public school teachers should be from $5,797 in 1967 to $7,453 in 1970 and then to $10,711 in 1977, the average annual increase being 8.7 percent during the earlier period and 5.3 percent during the later period.

In the Southwest, the rise should be from $6,089 to $7,647 and then to $10,711, the earlier average annual rate of increase being 7.9 percent and the later 4.9 percent.

In the Plains region, the rise should be from $6,202 to $7,722 and then to $10,711, the earlier rate of increase averaging annually 7.6 percent and the later one 4.8 percent.

In the Rocky Mountains region, the rise should be from $6,377 to $7,838 and then to $10,711, the average annual rates of increase being 7.1 percent and 4.6 percent, respectively.

In New England, the rise should be from $7,087 to $8,308 and then to $10,711, or at average annual rates of 5.4 percent and 3.7 percent, respectively.

In the Great Lakes region, the rise should be from $7,096 to $8,314 and then to $10,711, the average annual rates of increase being 5.4 percent and 3.7 percent, respectively.

In the Mid East, the rise should be from $7,475 to $8,566 and then to $10,711, the average annual rates of increase being 4.6 percent and 3.2 percent, respectively.

And in the Far West, the rise should be from $8,154 to $9,016 and then to $10,711, the average annual rates of increase being 3.4 percent and 2.2 percent, respectively.

Comparing the Far West, where the average salary is now the highest, with the Southeast, where the average is now the lowest, the needed average annual rate of increase in the Southeast is shown to be more than 2½ times as high as in the Far West during the earlier period, and almost 2½ times as high during the later period.*

Turning to the goals by States, the needed average annual rate of increase in teachers' salaries in the public schools, 1967-1977, is set forth at less than 4.0 percent in 13 States, 4.0-4.9 percent in 11, 5.0-5.9 percent in 9, 6.0-6.9 percent in 13, and 7.0 percent or over in 5.** Nationwide, the average annual rate of increase, 1966-1967, comes to 4.6 percent.***

Flexibility, not a straightjacket

It should be stated most emphatically that the foregoing figures are designed only to indicate the *minimum* amount of progress that must be made in each region and State to bring them all to the level of educational services *below* which, in the view of this study, no region or State should fall. It does not and cannot mean that those regions and States which are now at relatively high teachers' salary levels, and whose wealth and income will permit them to lift them still higher, should be limited in any way by this nationwide minimum standard.

For example, in the region where the average pay in 1967 was $8,154, there is no reason in the world why teachers' salaries in this region by 1977 should not average a great deal above $10,711.

The only requirement envisaged by the study is that in no region or State shall the average by 1977 be lower than $10,711.

The study does not attempt to impose a straightjacket, but merely urges a floor, just as in the case of a nation-wide minimum-wage standard, or the nationwide health-service standard which we should seek to achieve. The study seeks to combine nationwide minimum standards with State and local freedom and flexibility. In the region where the average pay in 1967 was $8,154, for example, the process of collective bargaining, public education, and all available devices should continue to be exercised to advance teachers' pay in accord with what that region and the States within it can properly afford, benefiting as they will by the much higher levels of Federal assistance which will fall to them under the proposals set forth in this study. The greatly increased Federal aid which would flow to such region and the States within it would tremendously facilitate such efforts to advance teachers' salaries far above the nationwide standard which the study sets.

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* See again chart on page 54.

** Fifty-one in all, including D.C.

*** See chart on page 55.

Salary goals compared with pay prospects of other professions

The goals for teachers' salaries in our public schools are not "too high" by any fair test. They are not too high when measured against our economic and financial capabilities, as will be demonstrated in a later chapter. They are not too high when tested by fair utilization of the productivity-gain principle. And they are not too high when compared with the pay prospects in other professions.

Looking back to an earlier phase of the discussion, in 1968 the nationwide average *starting* salary of men in other professions with bachelor's degrees ranged from $6,780 in the liberal arts to $8,544 in engineering. These salary levels would need to increase at average annual rates of 5.2 percent and 2.5 percent, respectively, to reach, in 1977, the $10,711 goal set, not as a starting salary but rather as an *average* salary, for all public school teachers throughout the nation in 1977. The nationwide average starting salary of men in other professions with master's degrees ranged from $8,376 in the liberal arts to $10,020 in engineering. These salaries would need to increase at average annual rates of 2.8 percent and 0.1 percent, respectively, to reach the $10,711 goal set for teachers in 1977. And nothing could be more certain than that those in these other professions will, in general, advance their earnings much more than all save one of the percentage rates just referred to. These rates are far below any normal or rational rates of income advance in the American economy generally. Thus, the goal for average teachers' salaries, if achieved, would leave them, even in 1977, with very moderate pay compared with others.*

Adjustment for cost-of-living trends

One word of warning is imperative at this point. The goals for teachers' salaries in this study are set forth in 1967 dollars to indicate the needed rates of *real* income progress. But the average annual rate of increase in the cost of living for the three-year period from June, 1965, to

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* See again chart on page 51.

June, 1968, was 3.2 percent. If this trend were to continue, the average annual salary of all public school teachers throughout the nation would need to be $8,937 rather than $8,139 in 1970 to be equivalent to that goal, and would need to be $14,674 rather than $10,711 in 1977. In other words, every goal for teachers' salaries set forth in the study will need to be adjusted upward in current-dollar terms (insofar as may become necessary) to factor in properly any increases in the cost of living which have occurred or may occur from 1967 forward.

Note regarding earlier study

In December, 1967, the author of the current study published, through the Conference on Economic Progress, *Goals for Teachers' Salaries in Our Public Schools*. The findings in that study are essentially consistent with those in the current study, although additional work has resulted in some modifications—hopefully, improvements. For example, the earlier study, adjusting from a 1961 base, set a nationwide average salary for teachers in public schools of $8,723 in 1970, compared with the $8,139 goal in the current study. But the earlier projection was in *current* dollars, and assumed a 3.0 percent average annual rate of increase in the cost of living, 1967-1970, while the current study projects in *constant* 1967 dollars. Allowing for this difference, the goals set forth in the two studies are quite consistent.*

Salary goals for nonteacher instructional staff

Because Group One consists mostly of professional personnel whose jobs generally require more years of education and training than the average classroom teacher, the average salary of this Group was $9,574 in 1967.** And because future qualifications for Group One are not likely to change relative to those for teachers, this study projects the same rates of increase in their salaries as for teachers. Thus, their salaries should increase to $11,411 by 1970, $12,343 by 1972, and $15,017 by 1977.

The skills of persons in Group Two are not as high as among teachers, since most of the former are not fully accredited, and include substantial numbers of subprofessionals. Lacking precise information but based upon informed judgment, average pay for this Group is estimated at $4,554 in

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* See chart on page 73 of the earlier study.

** The salary estimate for 1967 probably includes pay of a small number of personnel included in the Group Two, but again the available data do not permit a separate breakdown for that year.

1967, or two-thirds the average salary paid to teachers. Again, assuming that qualifications of this Group do not change relative to those of teachers, the pay of the former is projected to rise at the same rate as that of teachers. Thus, their pay should average $5,429 in 1970, $5,872 in 1972, and $7,144 in 1977.*

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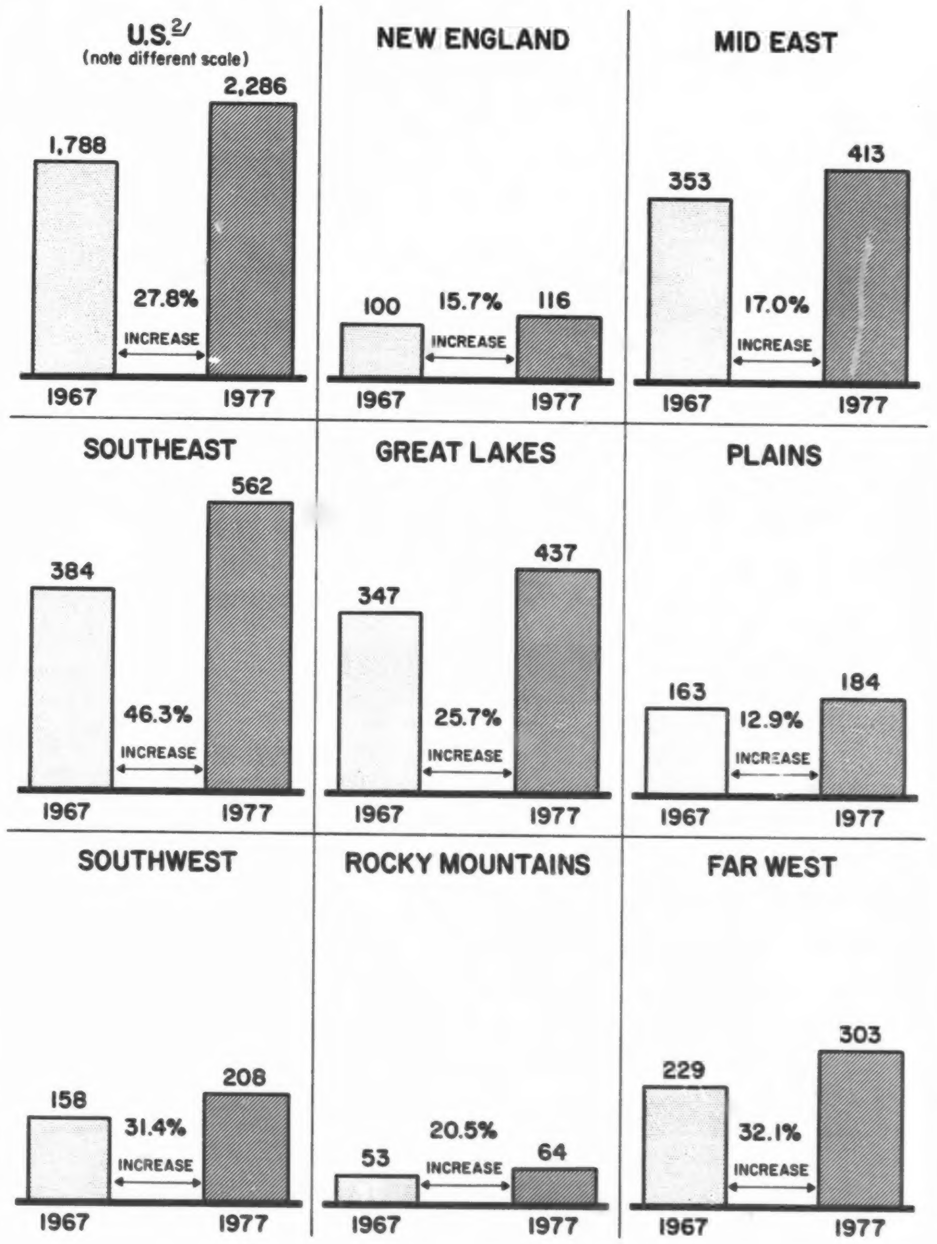
* See again chart on page 49.

CLASSROOM TEACHERS IN PUBLIC SCHOOLS,1967 AND GOALS FOR 1977[1]

(Thousands)

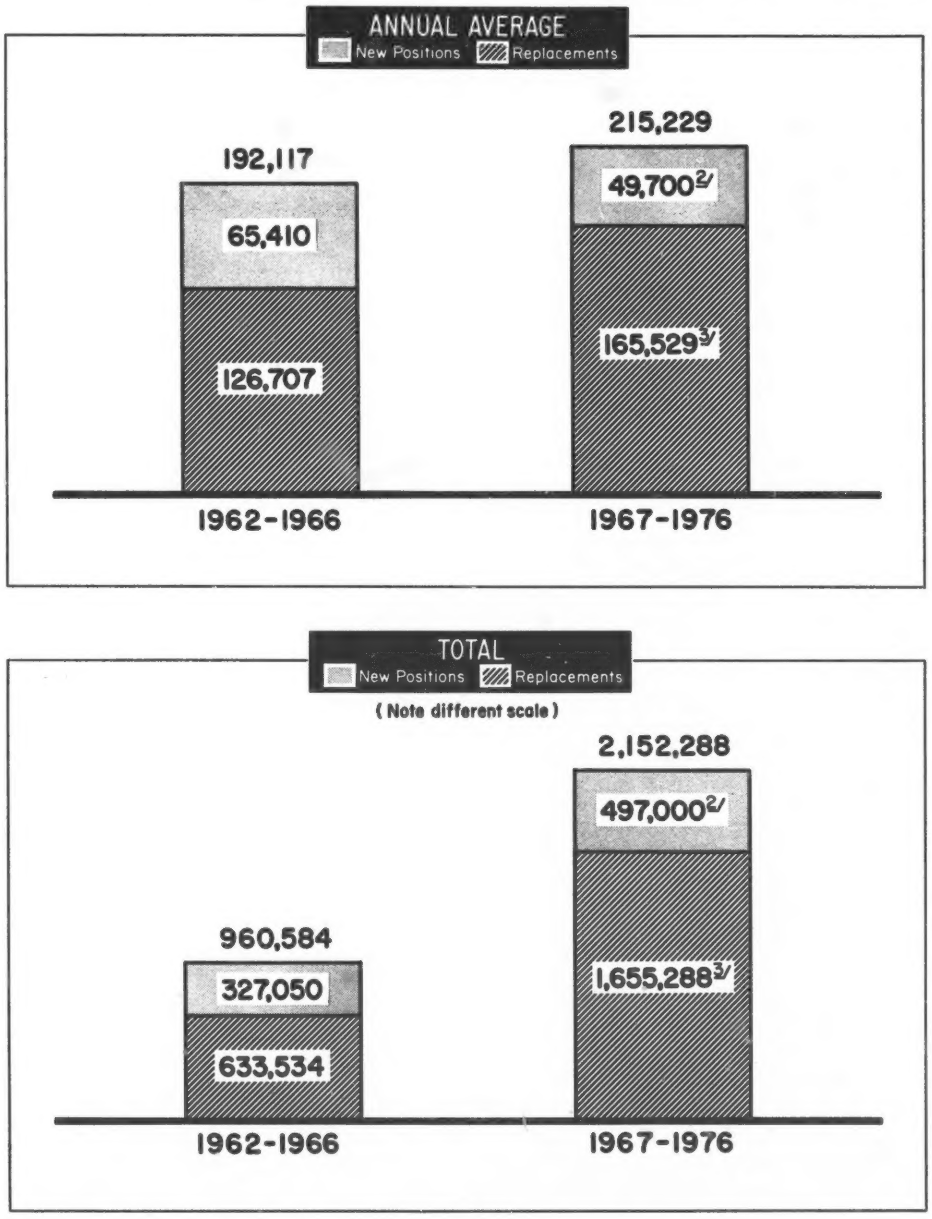


[1] Elementary (including kindergarten) and secondary public school. School year 1966-1967 shown as 1967, etc. Goals for U.S. and regions based upon pupil-teacher ratio of 20 to 1 in 1977, compared with ratios in 1967 of 24.0 to 1 nationwide, and ranging from 22.0 to 1 in the Plains to 25.8 to 1 in the Far West. The concept involved in the goals is fully accredited persons serving as teachers.

[2] 50 States and D.C.

Basic Data: Office of Education, Dept. of H.E.W.; National Education Association.

DEMAND FOR NEW TEACHERS IN THE PUBLIC SCHOOLS
ACTUAL, 1962-1966, AND PROJECTED, 1967-1976[1]



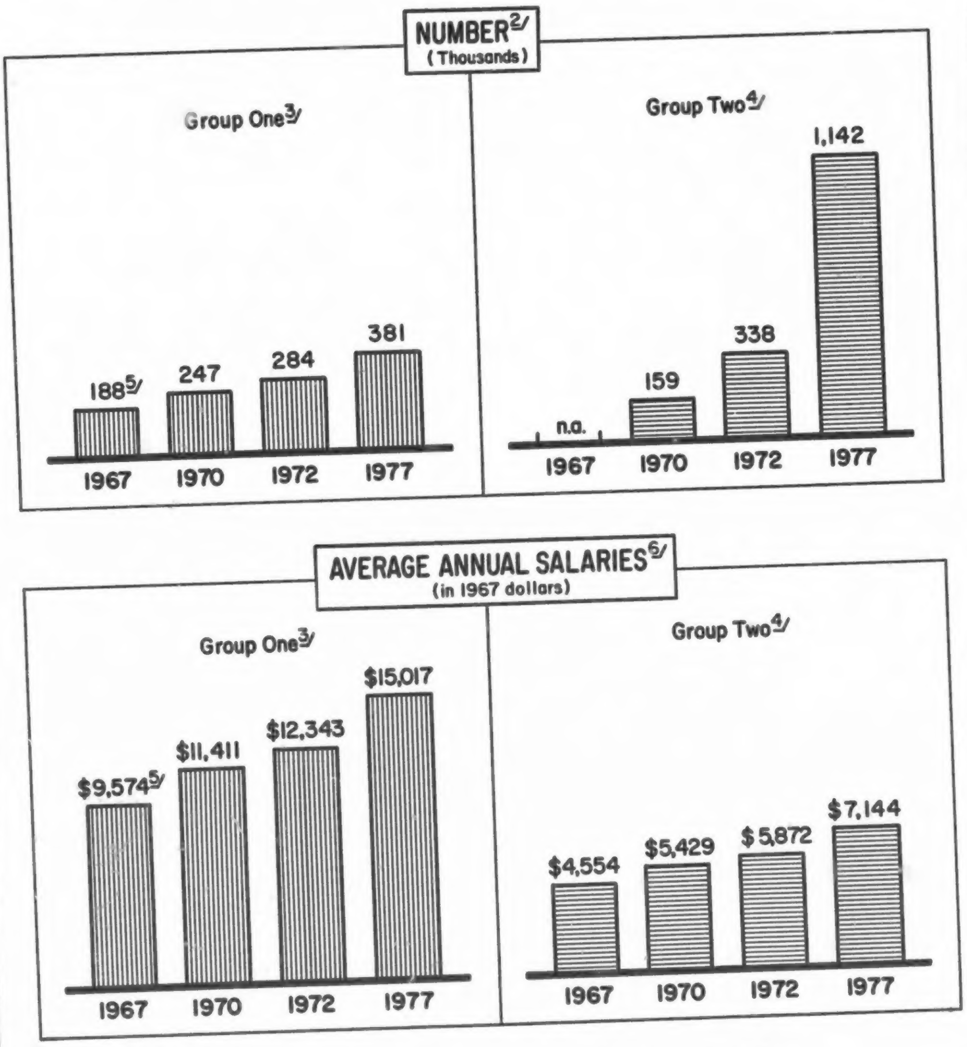
[1] 50 States and D.C. Elementary (including kindergarten) and secondary public schools. Data relate to fall of each year.

[2] Includes new teachers needed to meet enrollment increases plus those needed to achieve a pupil-teacher ratio of 20 to 1 by 1977.

[3] Includes new teachers to cover teacher turnover at 8% a year, and allowance (30,000) for that portion of those insufficiently qualified teachers in 1966 (90,500) not brought up to satisfactory standards by various methods and not within the 8% turnover.

Basic Data: Office of Education, Dept. of H.E.W.

NONTEACHER INSTRUCT. STAFF, PUBLIC SCHOOLS, '67 AND GOALS FOR 1970, 1972, AND 1977[1]



[1] Excludes fully accredited persons serving as teachers. 1966–1967 school year shown as 1967, etc.

[2] Projected at higher growth rates in earlier years.

[3] Includes principals, supervisors, librarians, guidance and psychological personnel, and other fully acredited nonteacher instructional staff. Number goal for 1977 is based upon achieving a ratio to teachers of 1 to 6, deemed to be desirable.

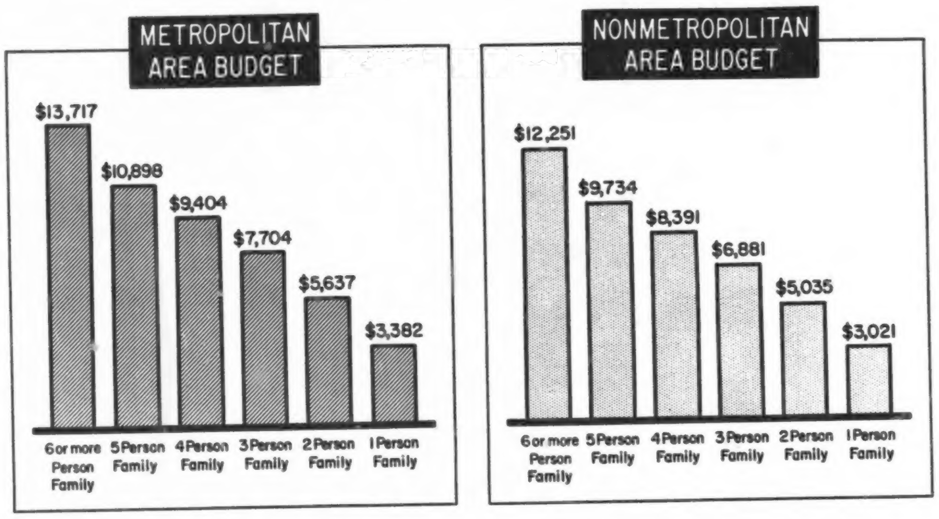
[4] Other persons assisting teachers in instructional functions. Number goal for 1977 involves a ratio to teachers of 1 to 2. A total total nonteacher instructional staff of 1,523 in 1977 involves a pupil–nonteacher instructional staff ratio of 30 to 1 which, coupled with a pupil–teacher ratio of 20 to 1, involves a pupil–total instructional staff ratio of 12 to 1.

[5] The figures for 1967 probably include some in Group Two, but available data do not permit a breakdown between the two groups for 1967. The goals clearly separate the two groups.

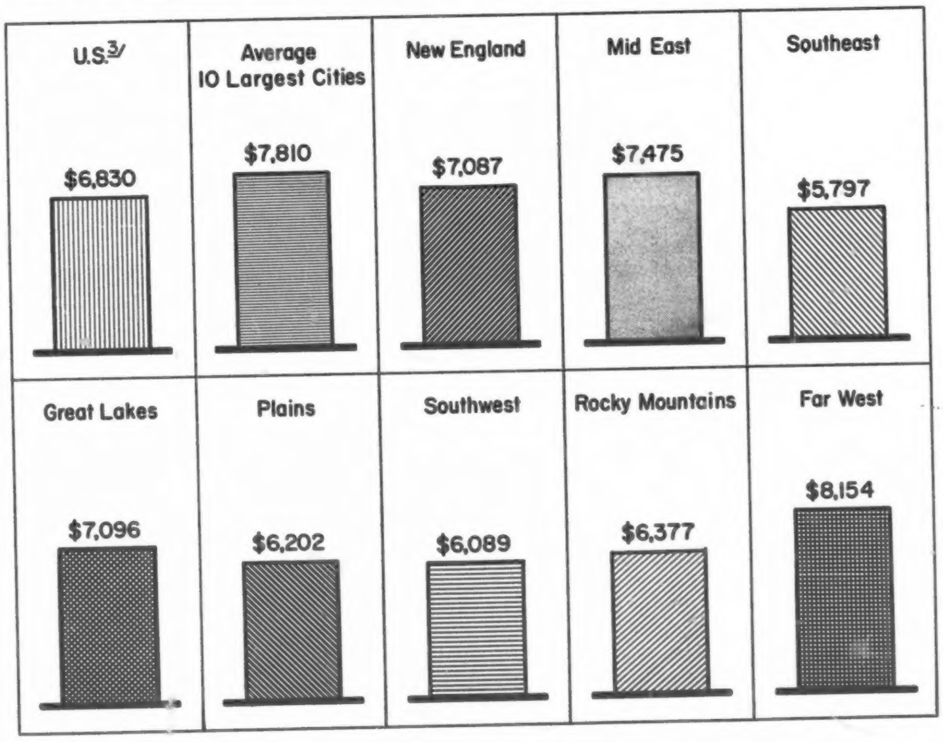
[6] Projected at the same rates of growth as teachers' salaries. (6.0% average annual increase 1967–1970, and 4.0% 1970–1977). The 1967 averages are rough approximations, for reasons set forth in [5] above.

Basic Data: National Education Association; Office of Education, Dept. of H.E.W.

MODERATE STANDARD OF LIVING BUDGET, 1967[1]



AVE. ANN. SALARIES, PUBLIC SCHOOL TEACHERS, 1967[2]



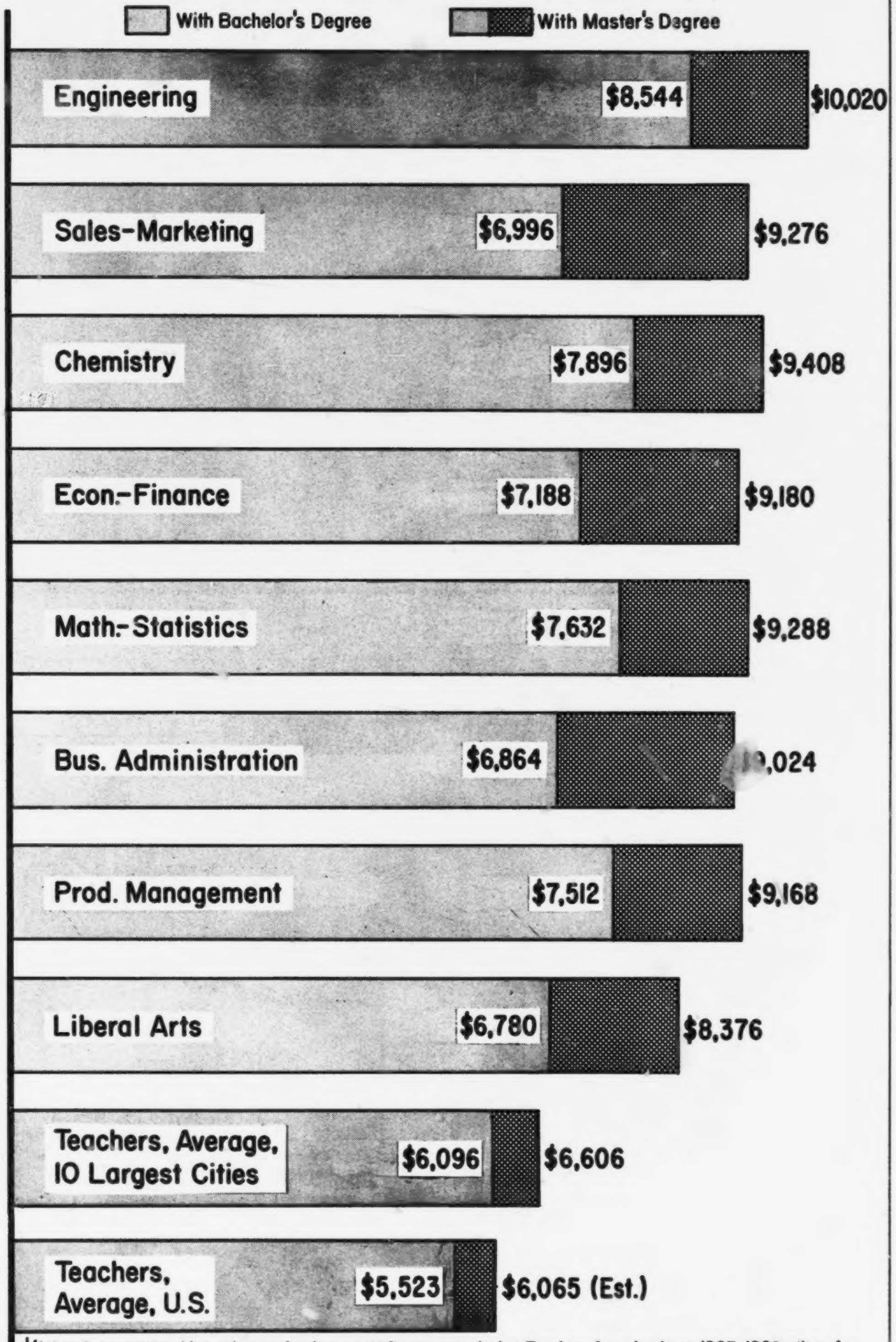
[1] Estimates of B.L.S. for Autumn 1966, adjusted to February 1967 (mid point of 1966-'67 school year) by use of C.P.I. Estimates for families of other sizes based upon B.L.S. indexes for families of relative sizes. Metropolitan areas defined as having populations of 50,000 and over; nonmetropolitan 2,500-50,000.

[2] Elementary (including kindergarten) and secondary public schools. School year 1966-1967 shown as 1967

[3] 50 states and D.C.

Basic Data: Bureau of Labor Statistics, U.S. Dept. of Labor; National Education Association; Office of Education, Dept. of H.E.W.

AVERAGE ANNUAL STARTING SALARIES PUBLIC SCHOOL TEACHERS AND OTHERS WITH VARIOUS TYPES OF TRAINING, 1968[1]



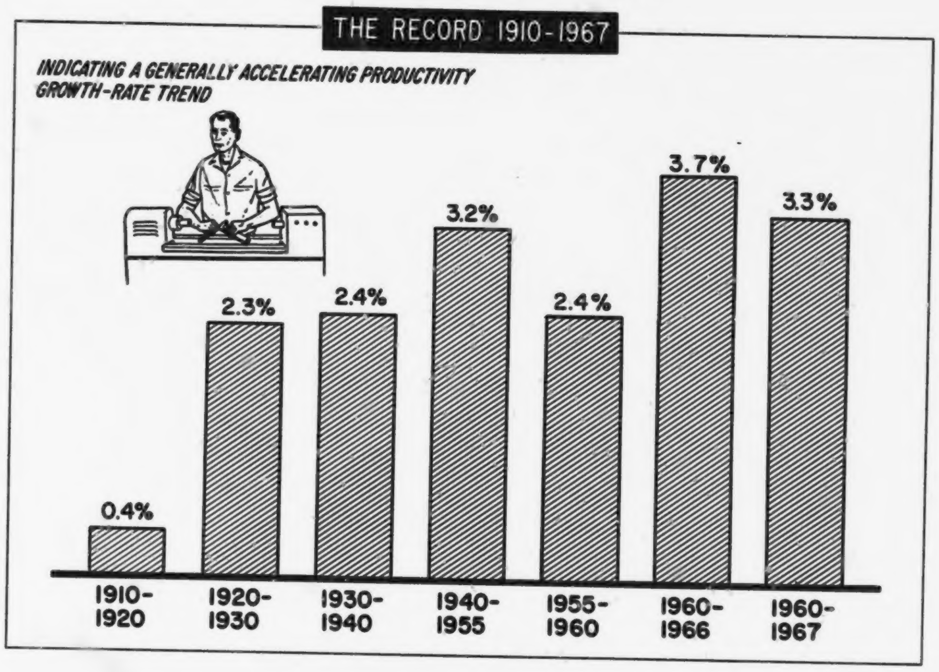
[1] All male except teaching, other professions are U.S. average salaries. Teachers for school year 1967-1968, others for those starting work post June 1967. Source: National Education Association

2

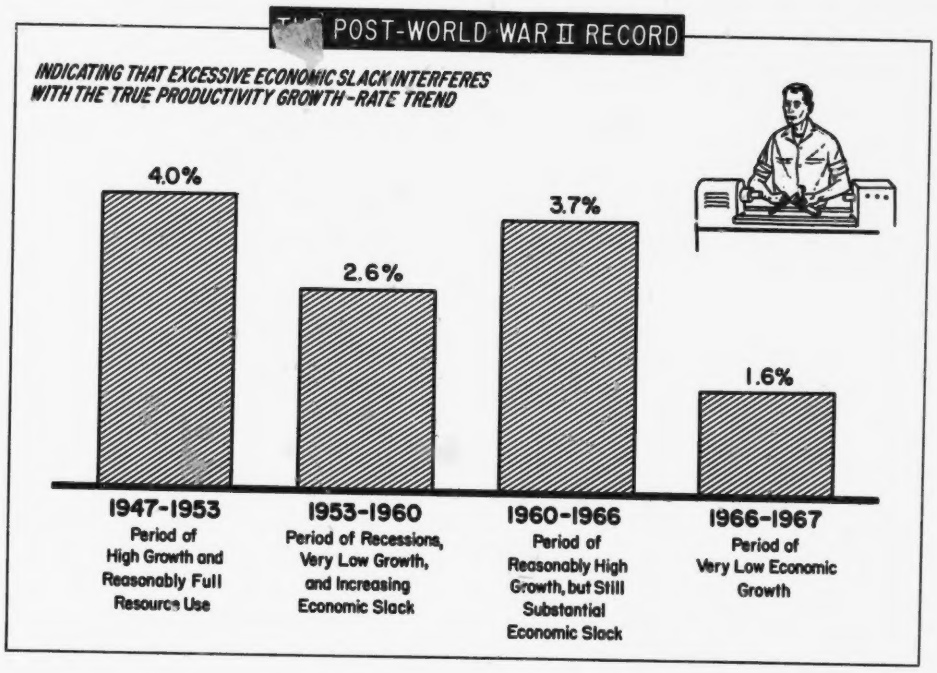
LONG-TERM TRENDS IN PRODUCTIVITY U.S. PRIVATE ECONOMY, 1910-1967

Average Annual Rate of Growth in Output per Man-hour for the Entire Private Economy

THE RECORD 1910-1967



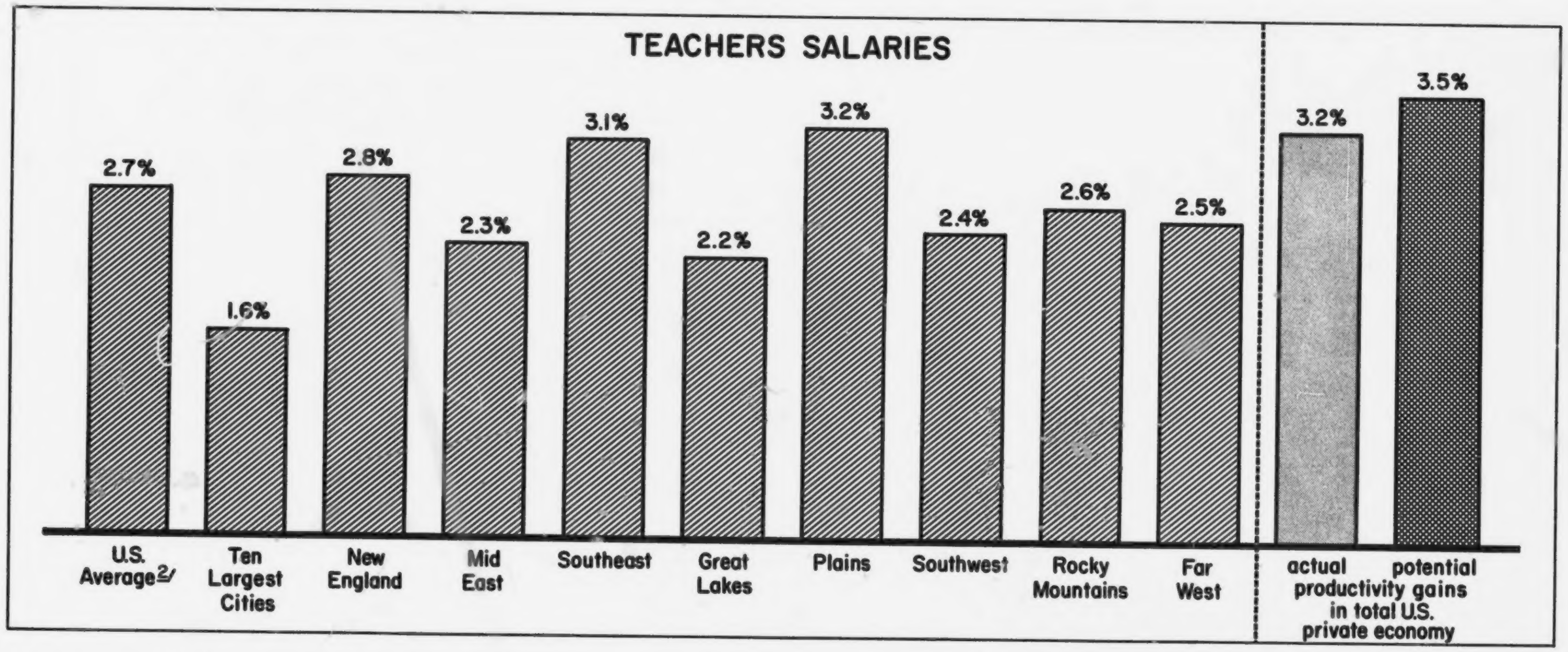
THE POST-WORLD WAR II RECORD



Source: Dept. of Labor estimates relating to man-hours worked (Establishment basis).

TEACHERS' SALARIES HAVE LAGGED BEHIND NATIONWIDE PRODUCTIVITY GAINS, 1961-1967[1]

(Average Annual Change in 1967 Dollars)



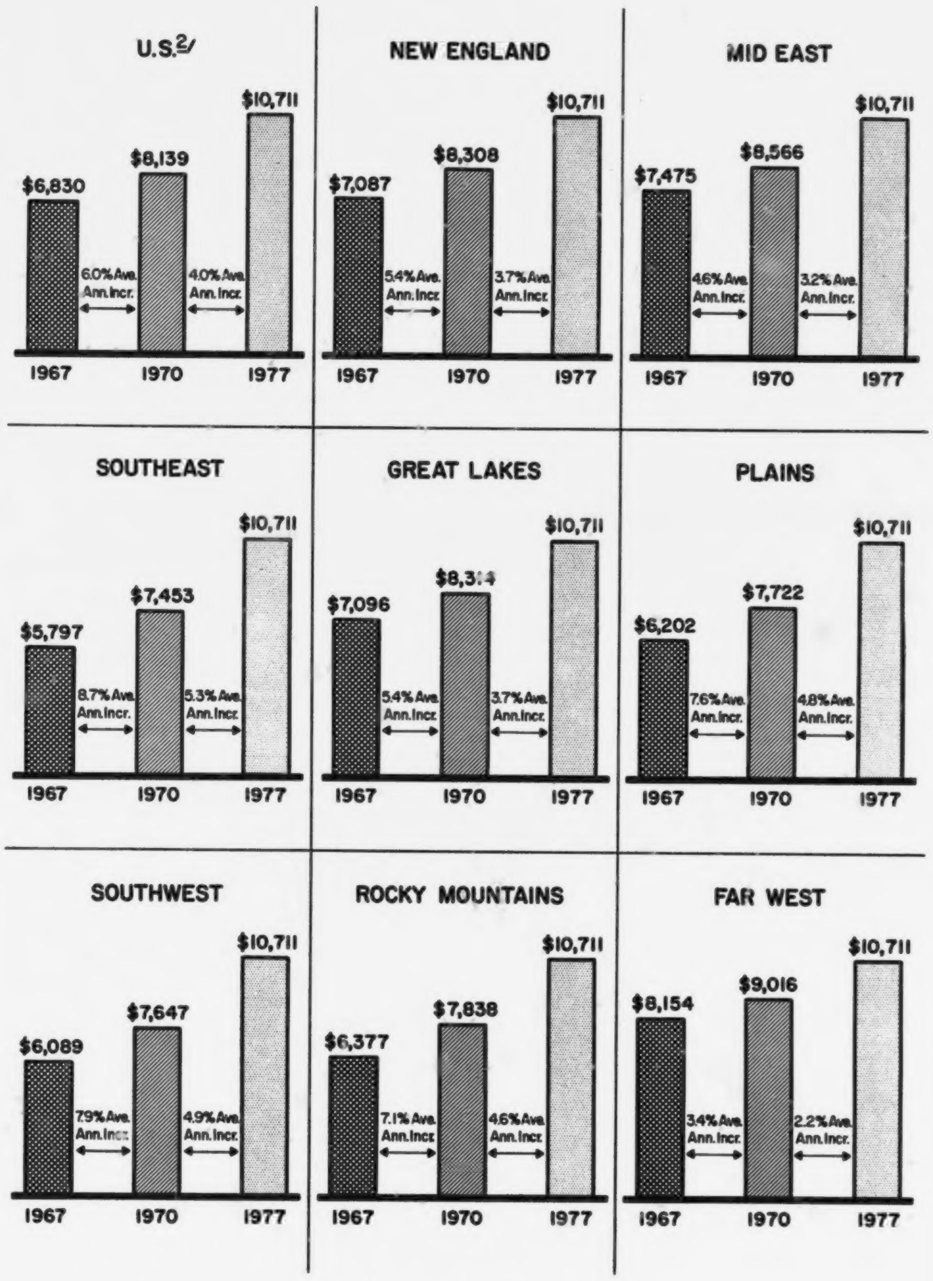
[1] School years 1960-1961 through 1966-1967. Productivity, calendar years. Salaries, school years. Elementary (including kindergarten) and secondary public schools.

[2] 50 states and D.C.

Basic Data: Office of Education; Dept. of H.E.W.; National Education Association.

AVE. ANN. SALARIES, PUBLIC SCHOOL TEACHERS, 1967 AND GOALS FOR 1970 AND 1977, BY REGION[1]

(In 1967 Dollars)



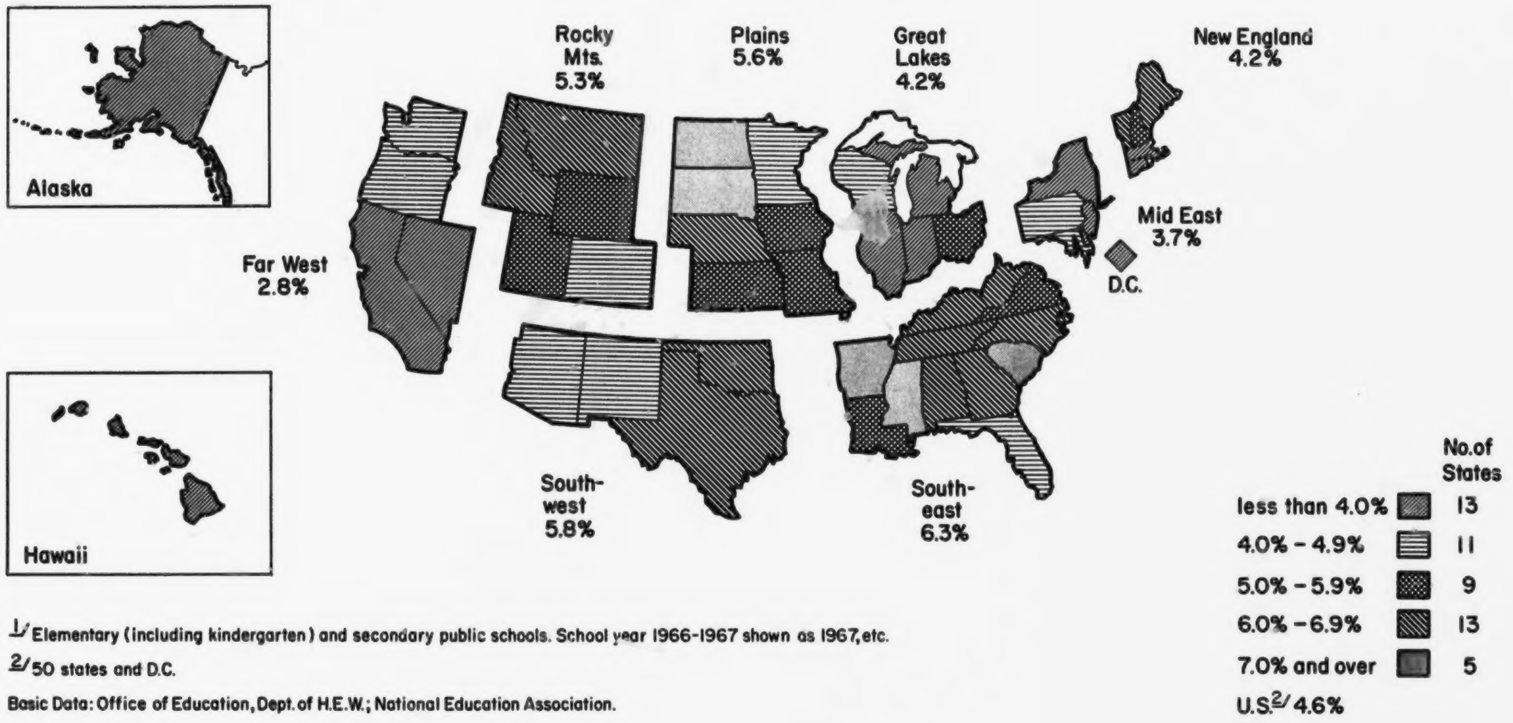
[1] Elementary (including kindergarten) and secondary public schools. School year 1966-1967 shown as 1967, etc.

[2] 50 States and D.C.

Basic Data: National Education Association

VARIED INCREASES BY STATE AND REGION NEEDED TO EQUALIZE TEACHERS' SALARIES BY 1977[1]

(Average Annual Rate of Increase needed 1967-1977, to achieve goal of $10,711)


Alaska
Hawaii
Far West
2.8%
Rocky
Mts.
5.3%
Plains
5.6%
Great
Lakes
4.2%
New England
4.2%
Mid East
3.7%
D.C.
South-
west
5.8%
South-
east
6.3%
No.of
States
less than 4.0% ▨ 13
4.0% - 4.9% ▤ 11
5.0% - 5.9% ▩ 9
6.0% - 6.9% ▧ 13
7.0% and over ■ 5
U.S.[2] 4.6%

[1] Elementary (including kindergarten) and secondary public schools. School year 1966-1967 shown as 1967, etc.

[2] 50 states and D.C.

Basic Data: Office of Education, Dept. of H.E.W.; National Education Association.

V. Paying the Bills

The problem of equalization

The discussion thus far makes clear that we have an immense nationwide job to do, in order to achieve equalized educational excellence in all of our public schools by 1977. But how much will it cost to do this? And how should the burden of meeting these costs be divided between the Federal Government on the one hand and the States and localities on the other, especially taking into account (as already noted) that very different rates of progress are required in different regions and States because currently some are much further than others below the equalization goals.

Relative economic capabilities and educational efforts, by region

In 1967, the total personal incomes per pupil enrolled in the public schools ranged from $18,918 in the Mid East to $10,604, or 44.0 percent lower, in the Southeast. The figure was 40.8 percent lower in the Southwest, and 41.5 percent lower in the Rocky Mountains region, than in the Mid East. Even in New England, which was closest to the Mid East, the figure was 7.7 percent lower.

Obviously, these wide variations in incomes have made it impossible thus far to prevent wide variations by region in public-school outlays per pupil enrolled. Yet the income discrepancies have not been fully reflected in the relative outlays per pupil enrolled.

In some of the regions where personal income has been relatively low, the ratio of per-pupil public-school outlays to per-pupil personal income has been much higher than in some others where personal income has been relatively high.

For example, in the Rocky Mountains region, the ratio of per-pupil outlays from State and local sources to per-pupil personal income was 5.3 percent, and the ratio including Federal aid was 5.8 percent. In the Southeast, the ratios were 4.1 percent and 4.7 percent, respectively. But in New England, the ratios were only 3.6 percent and 3.9 percent, respectively. Thus, the relatively greater deficiencies in the public schools in the less economically endowed regions have not been due to relative lack of effort or concern, but rather to relative lack of economic development and income.*

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* See chart on page 65.

Need for more Federal aid to equalize educational facilities and services

The data discussed just above constitute one basic reason why greatly increased Federal aid is essential, unless we are prepared to accept the proposition that millions of children in some regions and States—although citizens of the nation also—shall remain indefinitely under even greater educational deprivation than others simply because they happen to live in parts of the country where general economic conditions are not as favorable as in others.

The second reason for vastly increased Federal aid, and an equally powerful one, is that—despite widespread impressions to the contrary—the financial resources of State and Local governments have been for many years under far greater strain than those of the Federal Government.

During the two decades 1946-1966 (later years not available for comprehensive comparisons), Federal outlays under the conventional concept of the Federal Budget have increased at an average annual rate of 2.9 percent. Even under the new concept of the Federal Budget promulgated for the first time in fiscal 1969, Federal outlays during 1958-1966 increased at an average annual rate of only 6.3 percent (5.9 percent under the old concept). And the new concept, including immense trust funds and other items, is not nearly as fair a basis for comparison with State and local outlays as the old concept. State and local outlays increased at an average annual rate of 10.6 percent during 1946-1966, and 8.0 percent during 1958-1966. During this 20-year period, the public debt of the Federal Government and agencies increased at an average annual rate of only 1.0 percent, and during the more recent period, 1958-1966, at an average annual rate of only 2.3 percent, while the average annual rates of increase in the public debts of the States and localities were 10.5 percent and 7.9 percent, respectively.*

A third factor of equal importance is that the imposition of taxation to meet public needs is far more equitable and desirably progressive at the Federal level than at State and local levels. Indeed, the total impact of State and local taxation tends to be horribly regressive and inimical to optimum economic growth.

The main components of total costs

Under the programs recommended in this study, total nationwide outlays for our public schools should rise from $28.3 billion in 1967 (school year 1966-1967) to $70.1 billion in 1977. The rate of growth must be highest during the years through 1970, in view of the great deficiencies existing as of 1967 and the need to move toward their elimination as soon as possible. Within these totals, the aggregate for teachers' salaries should rise from $12.2 billion in 1967 to $24.5 billion in 1977; other instructional salaries from $1.8 billion to $13.9 billion; other current outlays from $9.4 billion to $22.2 billion; capital outlays from $4.0 billion to $6.8 billion; and interest on the school debt from $0.9 billion to $2.7 billion.*

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* See chart on page 66.

The goals with respect to the salaries of teachers and other instructional personnel, and with respect to capital outlays, have been explained fully in previous chapters. Other current outlays include administration and operation and maintenance of plant; fixed charges (not including interest on the school debt); salaries of school aides and other noninstructional personnel; and other school services, including but not limited to summer schools, adult education and school lunches.

The very large increases in this category, with the goal for 1977 being more than 12 times as high as actual outlays in 1967, are not to be explained by any contemplation of very large increases in the conventional types of administrative staffs at high levels. Rather, the explanation resides in the need for very large expansion in such fields as summer schools, adult education, and school-lunch programs.

The estimate of costs for interest on the school debt derives rather automatically from the trends in the size of the school debt, affected by a degree of the proposed programs for construction, and affected also by uncertain estimates as to trends in interest rates. It is estimated that the average annual rate of increase in interest payments on the school debt would be about 11.6 percent during 1967-1977. These costs should and would be very much lower, if interest rates were returned to the lower levels which would benefit the economy, and especially benefit all public programs contingent upon borrowing.

Method One for sharing the costs

This study considers and evaluates two Methods of sharing the cost of what needs to be done between the Federal Government and the States and localities.

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* See chart on page 67.

The first of these, Method One, is this: For each State, the average annual advance in personal income in real terms is computed for the period 1961-1967, and also computed in ratio to the average annual rate of advance during the same period in real personal income throughout the nation. The average annual rate at which a particular State should increase its outlays for the public schools during 1967-1977 is then computed in the same ratio to the needed nationwide increase (Federal, State, and local combined) in such outlays (9.5 percent a year on the average). Each State is then called upon, under Method One, to increase its average annual outlays for public schools at this rate, with the Federal Government making up the difference, subject only to the limitation that the Federal percentage-share shall, in the case of any State, be no lower than it actually was in 1967. This Method, as applied to the States, might be called the economic-resource method.

Under this Method, with total nationwide outlays for the public schools needing to rise from $28.3 billion in 1967 to $70.1 billion in 1977 (all measurements in 1967 dollars), the State and local share would rise from $26.1 billion to $57.3 billion, but decline from 91.9 percent of the total to 81.7 percent. Meanwhile, the Federal share of the total would rise from $2.3 billion to $12.8 billion, or from 2.3 percent to 12.8 percent of the total. Under this Method, with the total rising at an average annual rate of 9.5 percent, State and local outlays would rise at an average annual rate of 8.2 percent, and Federal outlays at an average annual rate of 18.8 percent.*

While this Method has a good deal to be said for it, it seems far less preferable than Method Two. There are two main defects in Method One. The first is that, when examined carefully on a State-by-State basis, it seems clearly to impose too heavy a burden upon some States relative to their current and foreseeable resources. In terms of the difficulties and defects in their revenue efforts, it would impose upon them too drastic a change over the next decade. The second defect, closely allied to the first, is that any assumption that the States can increase their outlays for education (and other purposes) at the same pace as increases in their personal incomes neglects some of the realities of the nature of the revenue-raising systems among the 50 States. To take the simplest illustration, the States do not have income-tax systems comparable to that of the Federal Government.**

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* See again chart on page 67.

** The chart on page 68 depicts in detail, by region, how Method One would work out in terms of the sharing of responsibility, between the Federal Government and the States and localities.

Method Two for sharing the costs

Method Two, which might be called the modified projection of the recent trend pattern of State and local efforts, is as follows: Measured in 1967 dollars, the average annual rate at which each State has increased its outlays for public-school education during the years 1961-1967 is computed. The proposed formula then contemplates that each State should increase such outlays at the same average annual rate during 1967-1977, lifted by the percentage amount (as estimated by this study) that the average annual rise in total national production throughout the nation during 1967-1977 should exceed the average during 1961-1967. This yields the projected increase in outlays for public education on the part of each State, with the Federal Government making up the difference required to achieve the equalization goal for outlays per pupil enrolled throughout the nation by 1977 ($1,534, measured in 1967 dollars). This formula is also subject to the limitation that the Federal share in no State in any future year through 1977 shall fall below the Federal share in 1967.

Under this Method Two, which seems far preferable to Method One, State and local outlays for public education would rise to $42.8 billion in 1977, or 61.1 percent of the total needed outlays of $70.1 billion (compared with 91.9 percent of $28.3 billion in 1967). The balance would be made up by the Federal Government, with its outlays rising to $27.3 billion, or 38.9 percent of the total (compared with 8.1 percent of $28.3 billion in 1967). The average annual rate of increase in absolute outlays would be 5.1 percent for the States and localities, and 28.0 percent for the Federal Government, equating with the average annual rate of increase of 9.5 percent in all outlays for public education throughout the nation.*

Regional implications of Method Two

Necessarily, in the interest of equalization, the relative shares of the Federal Government and of the States and localities would vary by region (as well as State by State), and so would the absolute rates of increase in the Federal shares and the State and local shares. To illustrate, in the Mid East, the State and local share would decline from 93.7 percent in 1967 to 79.9 percent in 1977, and the Federal share would rise from 6.3 percent to 20.1 percent. The average annual rate of increase in absolute outlays would be 4.9 percent on the part of the States and localities, and 19.7 percent on the part of the Federal Government, with total outlays rising at an average annual rate of 6.7 percent.

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* See again chart on page 67.

In vivid contrast, the State and local share in the Southeast would decline from 85.9 percent to 41.7 percent, and the Federal share would increase from 14.2 percent to 58.3 percent. The absolute average annual rates of increase would be 5.4 percent on the part of the States and localities, and 30.0 percent on the part of the Federal Government, making up the 13.3 percent average annual rate of increase in total outlays for public-school education within the region.

Thus, in the Mid East the rate of increase in the absolute Federal contribution is about 4 times as fast as the rate of increase in the absolute State and local contributions, while in the Southeast the rate of increase in the absolute Federal contribution is more than 5½ times as fast as the rate of increase in the absolute State and local contribution.

These last comparisons provide one answer to the question which might be raised, as to why the rate of increase in the absolute contribution of the States and localities in the Southeast should be somewhat more rapid than in the Mid East. Another answer is that the relative rates of increase in the absolute outlays of the various regions are geared, as earlier indicated, to the relative trends in the education expenditures within these regions.*

Implications of Method Two for the States

The principle of gearing future State and local spending for public education to recent trends in the past (specifically, from 1961 to 1967), and the differential rates of growth derived therefrom, is illustrated further by comparing the 10 States in which spending from their own State and local resources is projected under Method Two to increase the fastest with the 10 States in which such spending would increase the slowest. Conversely, this illustration identifies those States in which Federal aid needs to increase the fastest and the slowest, respectively.

Compared with a projected nationwide increase in State and local spending averaging annually 5.1 percent, the 10 fastest-growing States would increase outlays from State and local resources at average annual rates ranging from 6.7 percent to 9.4 percent.** This would be about one-third to four-fifths faster than the average outlays projected for all States. That these States are scattered throughout the nation—from Hawaii to New Hampshire and from Florida to Wisconsin—suggests that the ability and even willingness of individual States and localities to finance education from their own resources depends considerably upon their economic capabilities.

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* See chart on page 69.

** In order of descending average annual increases, these are: New Hampshire (9.4 percent), Nevada (9.1 percent), Hawaii (8.2 percent), Maryland and Tennessee (8.1 percent), Vermont (7.6 percent), Virginia (7.4 percent), New Mexico (7.2 percent), Florida (7.0 percent), and Wisconsin (6.7 percent).

For similar reasons, Federal aid to these 10 States would not need to grow as rapidly as Federal aid to all States combined. Except for 2 of these 10 States, Federal aid would increase at rates well below the nationwide average annual increase of 28 percent (the exceptions being Tennessee and Virginia, where current outlays are well below the nationwide average, despite their above-average increase in recent years). For the other 8 States, Federal aid would increase at average annual rates ranging from 8.1 to 8.2 percent a year in Maryland and Hawaii, respectively, to 21 and 23 percent in Wisconsin and Florida, respectively.

Among the 10 States in which State and local spending is projected to grow the slowest, the rates of increase in spending out of State and local resources would range from 1.0 percent or less in 2 States to only 2.8 percent or less in 8 others.* For all but two of the 10 States in this category, Federal aid should, concomitantly, increase well above the nationwide average annual increase of 28 percent in Federal aid. The two exceptions are the District of Columbia and South Dakota (where Federal aid is currently well above the current average for all States). Among the 8 other States, Federal aid would need to rise at rates of at least 32 percent a year, ranging up to 44 percent for Wyoming.

Outlays per pupil under Method Two

Examination of Method Two must also take account of projected trends in outlay per pupil. Consistent with the goal of minimum-standard equalization, the goal for all types of outlays per pupil in the public schools sets a uniform figure of $1,534 in 1977 for every region, and also for every State. Per-pupil outlays in 1967 ranged from $847 in the Mid East to $525 in the Southwest and $503 in the Southeast. The Federal share per pupil in each region would manifestly be the same as the Federal share in total outlays in each region. But the average annual rates of increase in absolute outlays per pupil, and in the sharing of this cost, would necessarily vary from region to region, in view of the movement toward overall equalization. For example, in the Mid East, the absolute outlays of the States and localities per pupil would rise at an average annual rate of 4.4 percent, while Federal outlays would rise at 19.1 percent, and over-all outlays at 6.1 percent. In the Southeast, the respective rates of increase would be 4.0 percent, 29.0 percent, and 11.8 percent.*

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* In order of descending average annual increases, these are: South Carolina (2.8 percent), Illinois (2.3 percent), West Virginia, South Dakota, and Wyoming (2.2 percent), Kentucky (2.0 percent), Oklahoma (1.5 percent), Nebraska (1.4 percent), Kansas (1.0 percent), and District of Columbia (0.8 percent).

Why uniform nationwide outlays per pupil by 1977 are desirable

The question may be raised as to why this study recommends the uniform goal of total outlays of $1,534 per pupil in the public schools throughout the nation, regardless of regional and State differences in the cost of services, the cost of living, and other factors. The first answer to this question is that these variations even now are less than they are generally thought to be, and are rather unpredictable as to 1977. Refined efforts to work out further variations based upon these factors would result in complexities exceeding the value of such refinements.

A still more important answer is that the movement toward equalization throughout the nation should not be limited to public-school education, although that is perhaps the best place for it to start. In all of our basic national goals—economic growth, reduction of poverty, minimum-wage standards, social-security benefits, welfare payments, average family incomes, industrial development, etc.—we should certainly seek ever increasing equalization, rather than the perpetuation of the vast disparities now existing. Equalization of educational opportunity will contribute mightily toward these more general purposes.

Preservation of State and local flexibility and discretion

One caveat is again imperative. The goal of $1,534 per pupil by 1977 is applicable to every region and State, but only as a nationwide *floor* in support of equalization. This is somewhat analogous to a nationwide minimum-wage floor or nationwide standard for health services, and does not import that those who can afford to do so should not go substantially further.

While the $1,534 should be reached in every State, those States with the resources to do so might well be expected to rise substantially above this floor.

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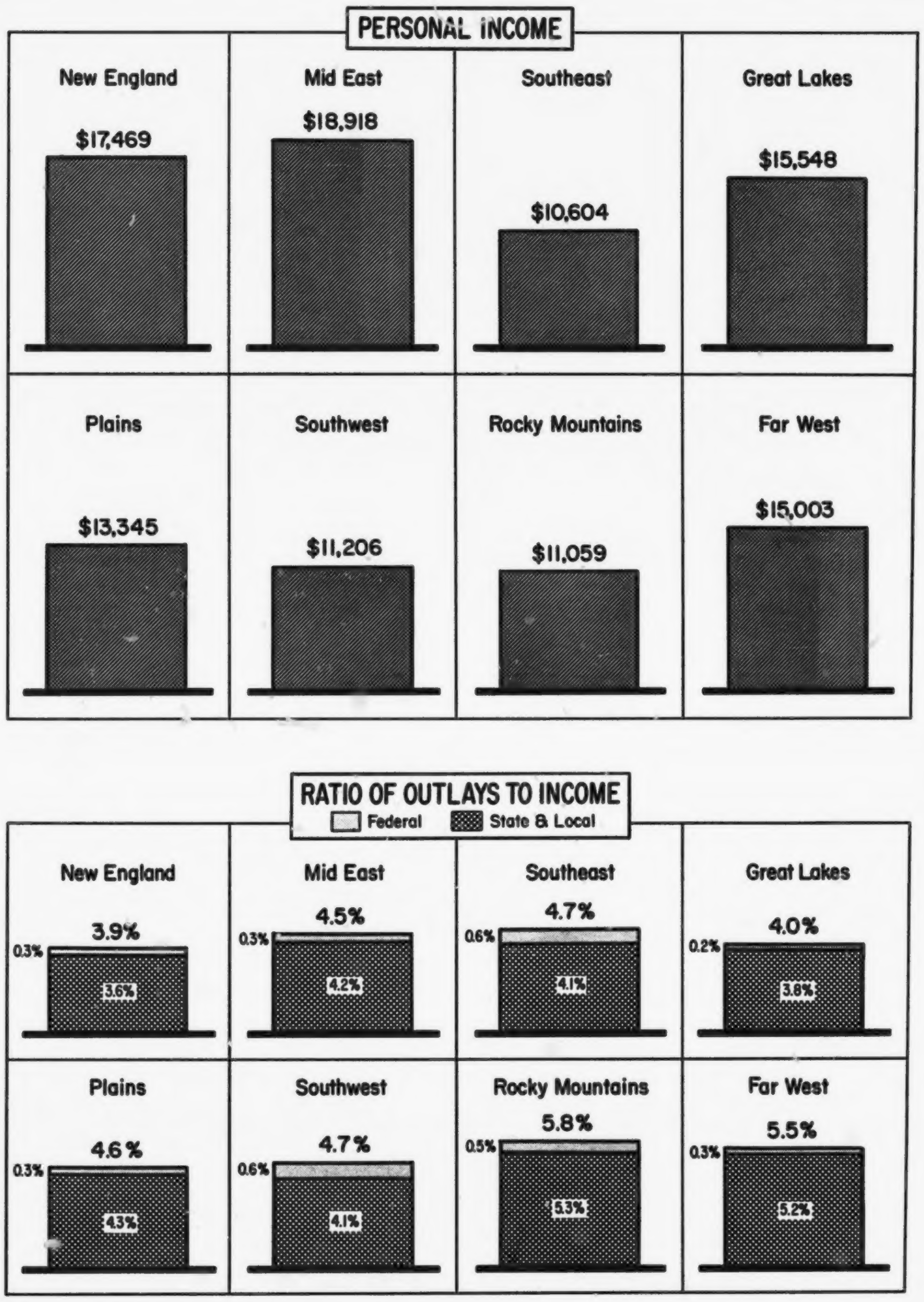
* See chart on page 70.

Achievement of this basic $1,534 per pupil even in the Southeast, from a starting point of $503 in 1967, is no reason why the Mid East, starting at $847 per pupil in 1967, should not advance far above $1,534 by 1967. It is only the Federal aid that would not go beyond helping to achieve the $1,534 goal.

Similarly, the $1,534 goal for each State is an *average* for that State. It does not imply that the per-pupil outlay should be the same in every locality, school, or class. The proposal, instead, combines nationwide responsibility and purpose with a large measure of State and local discretion and flexibility. The education of our young people is not a Federal *or* State *or* local responsibility. It is a Federal *and* State *and* local responsibility.

PER PUPIL PUBLIC SCHOOL OUTLAYS IN RATIO TO PER PUPIL PERSONAL INCOME, BY REGIONS, 1967[1]

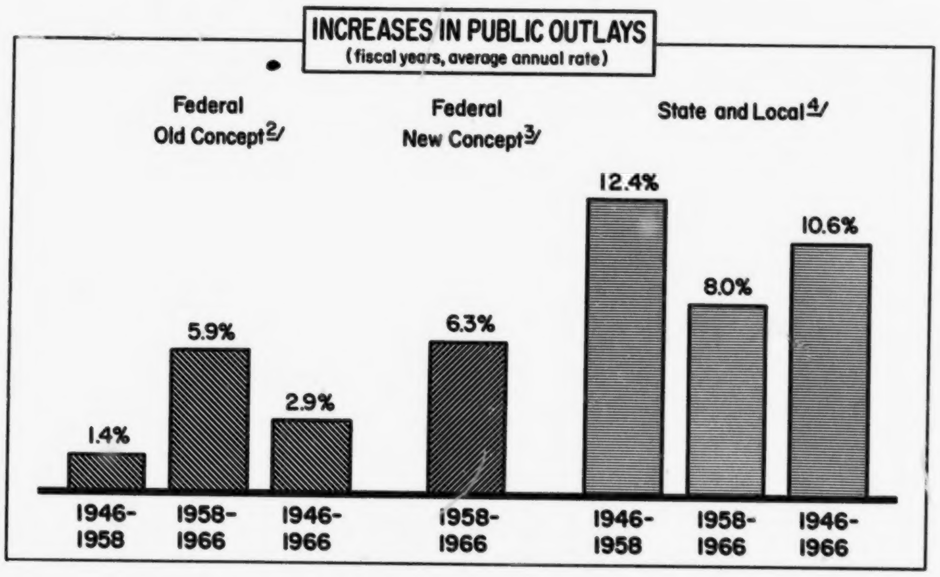


[1] Elementary (including kindergarten) and public secondary schools. Personal income, calendar 1967. Outlays, school year, 1966-1967.

Basic Data: Office of Business Economics, Dept. of Commerce; Office of Education, Dept. of H.E.W.; National Education Association

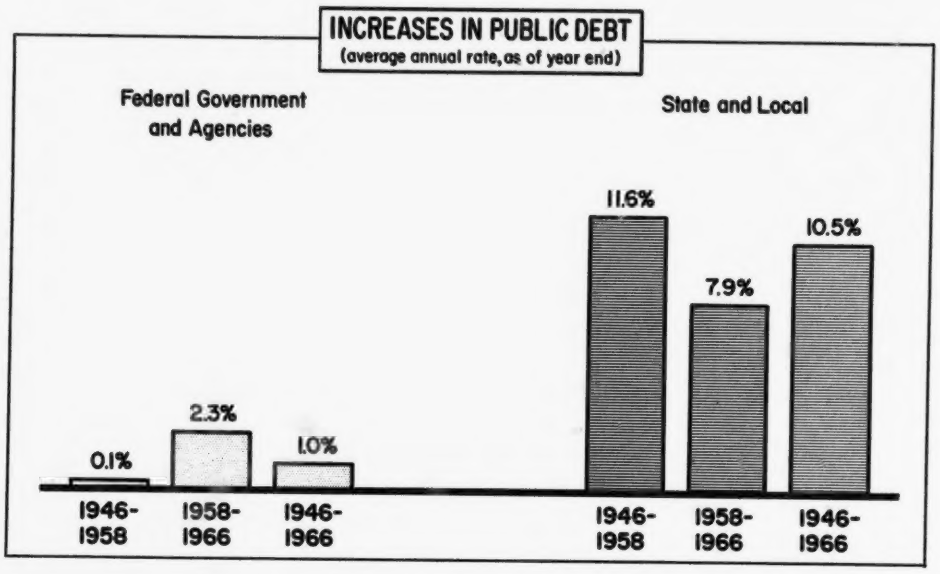
RESOURCES OF STATE AND LOCAL GOV'TS MORE STRAINED THAN THOSE OF FEDERAL GOV'T

RELATIVE TRENDS, 1946-1966[1]



INCREASES IN PUBLIC OUTLAYS

(fiscal years, average annual rate)



INCREASES IN PUBLIC DEBT

(average annual rate, as of year end)

[1] 1946-1966 selected because of availability of comparable data.

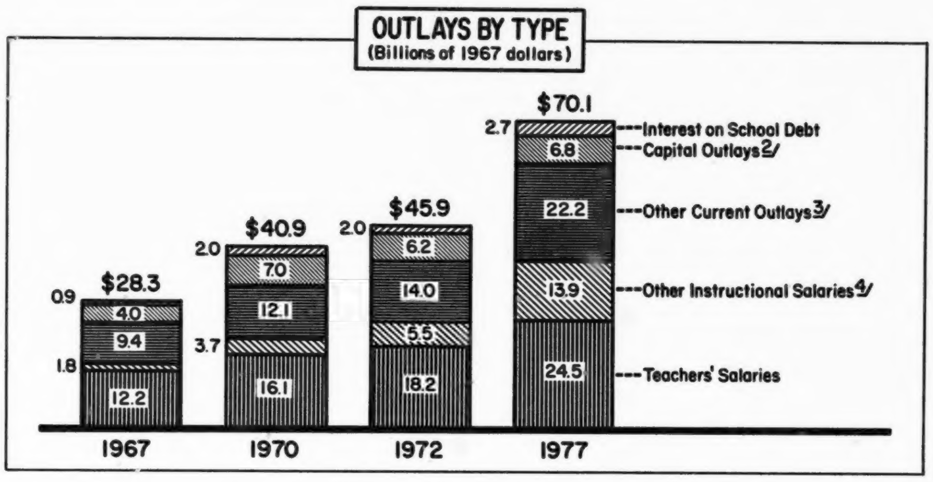
[2] Administrative Budget, most comparable to State and local expenditures.

[3] Concepts used in President's 1969 Budget, including Trust funds, net lending, and some other items. 1958 first year available.

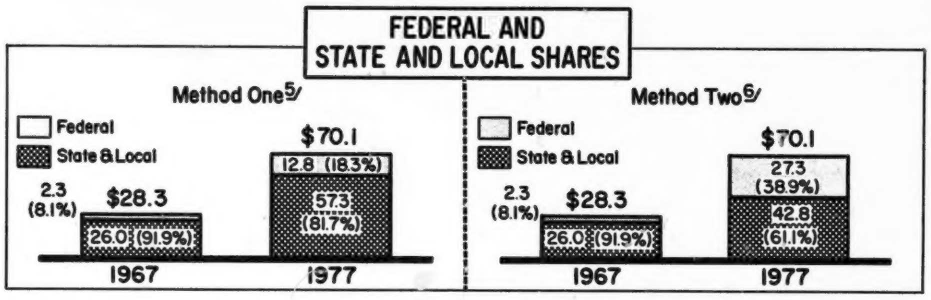
[4] Excludes insurance-trust activities, intergovernmental receipts and payments between State and local governments and expenditures of publicly owned utilities and liquor stores.

Basic Data: Dept. of Commerce; Treasury Dept.; Dept. of Agriculture; Board of Governors of the Federal Reserve System

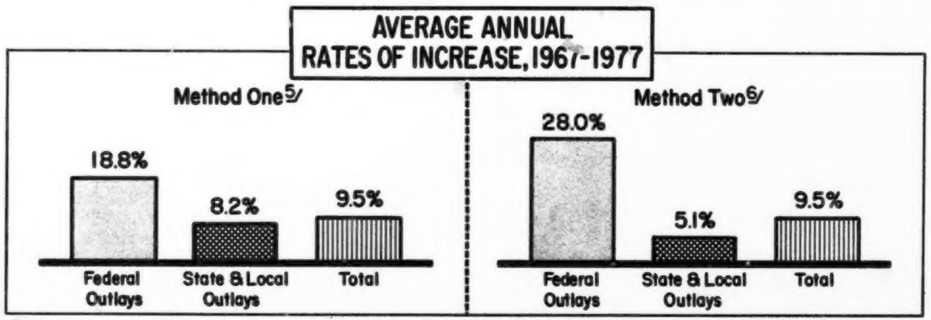
OUTLAYS FOR PUBLIC SCHOOLS, 1967 AND GOALS FOR 1970, 1972, AND 1977[1]



OUTLAYS BY TYPE
(Billions of 1967 dollars)



FEDERAL AND STATE AND LOCAL SHARES



AVERAGE ANNUAL RATES OF INCREASE, 1967-1977

[1] 50 states and D.C. Elementary (including kindergarten) and secondary public schools. School year 1966-1967 shown as 1967, etc.

[2] Classroom construction for replacement, elimination of unsatisfactory conditions, increased enrollment, and reduction of class size.

[3] Includes administration and operation and maintenance of plant; fixed charges; salaries of school aids, maintenance personnel, and other noninstructional personnel; and such programs as summer schools, adult education and school lunch.

[4] Includes principals, supervisors, librarians, guidance and psychological personnel, and other fully accredited nonteacher instructional staff.

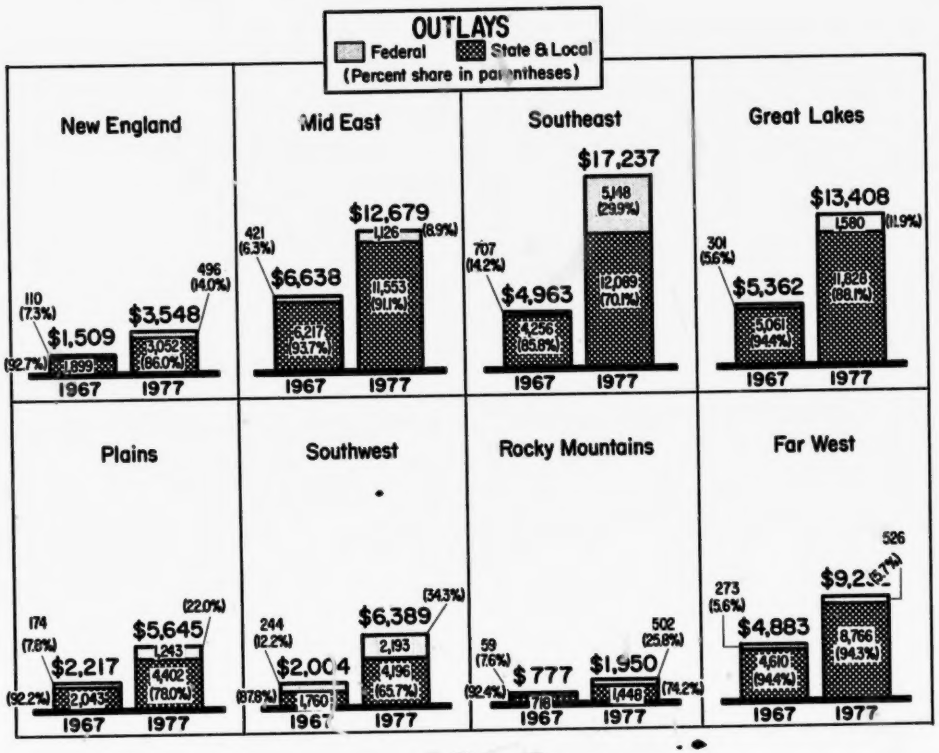
[5] State and local share based on recent trends in personal income.

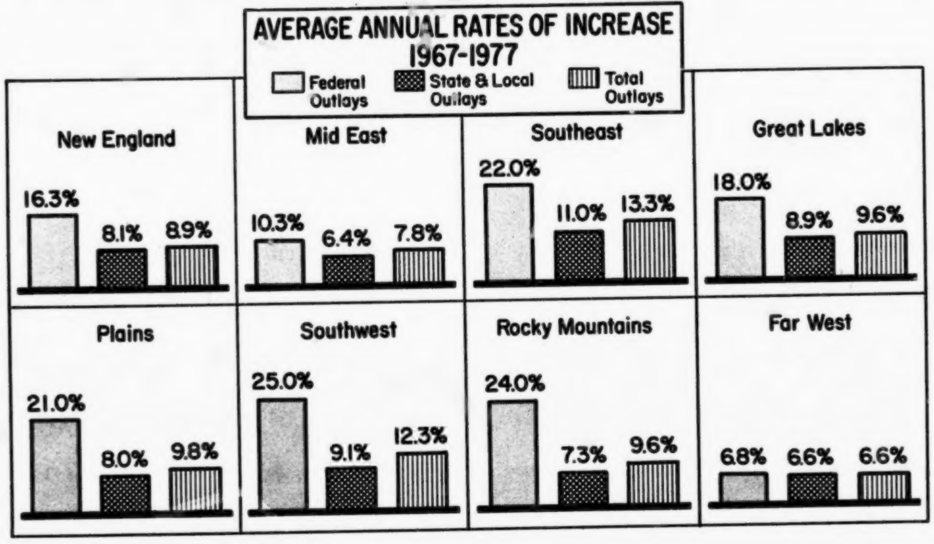
[6] State and local share based on recent in State and local public school expenditures.

Basic Data: Office of Education, Dept. of H.E.W.; National Education Association

OUTLAYS FOR PUBLIC SCHOOLS BY REGION, 1967[1] AND GOALS FOR 1977 UNDER METHOD ONE[2]

(millions of 1967 dollars)





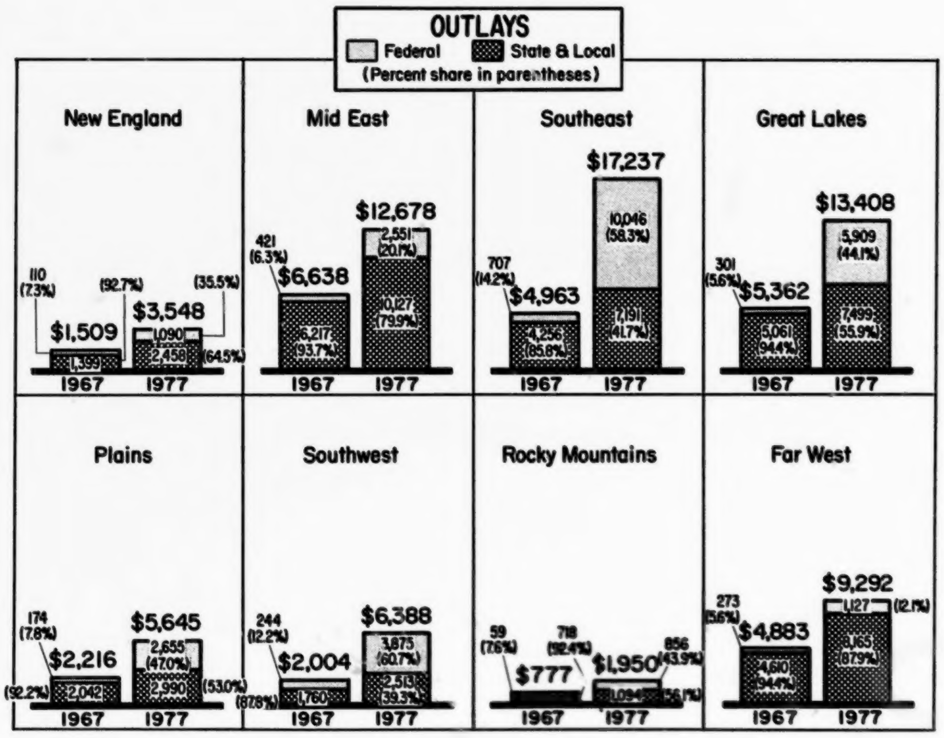
[1] Elementary (including kindergarten) and secondary public schools. School year 1966-1967 shown as 1967, etc.

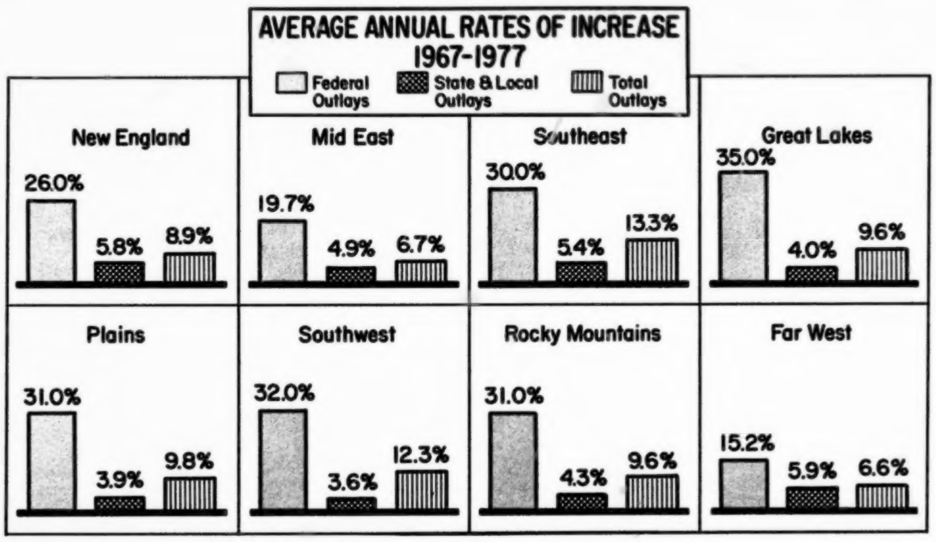
[2] State and local share based on recent trends in personal income.

Basic Data: National Education Association; Office of Education, Dept. of H.E.W.

OUTLAYS FOR PUBLIC SCHOOLS, BY REGIONS, 1967[1] AND GOALS FOR 1977 UNDER METHOD TWO[2]

(millions of 1967 dollars)





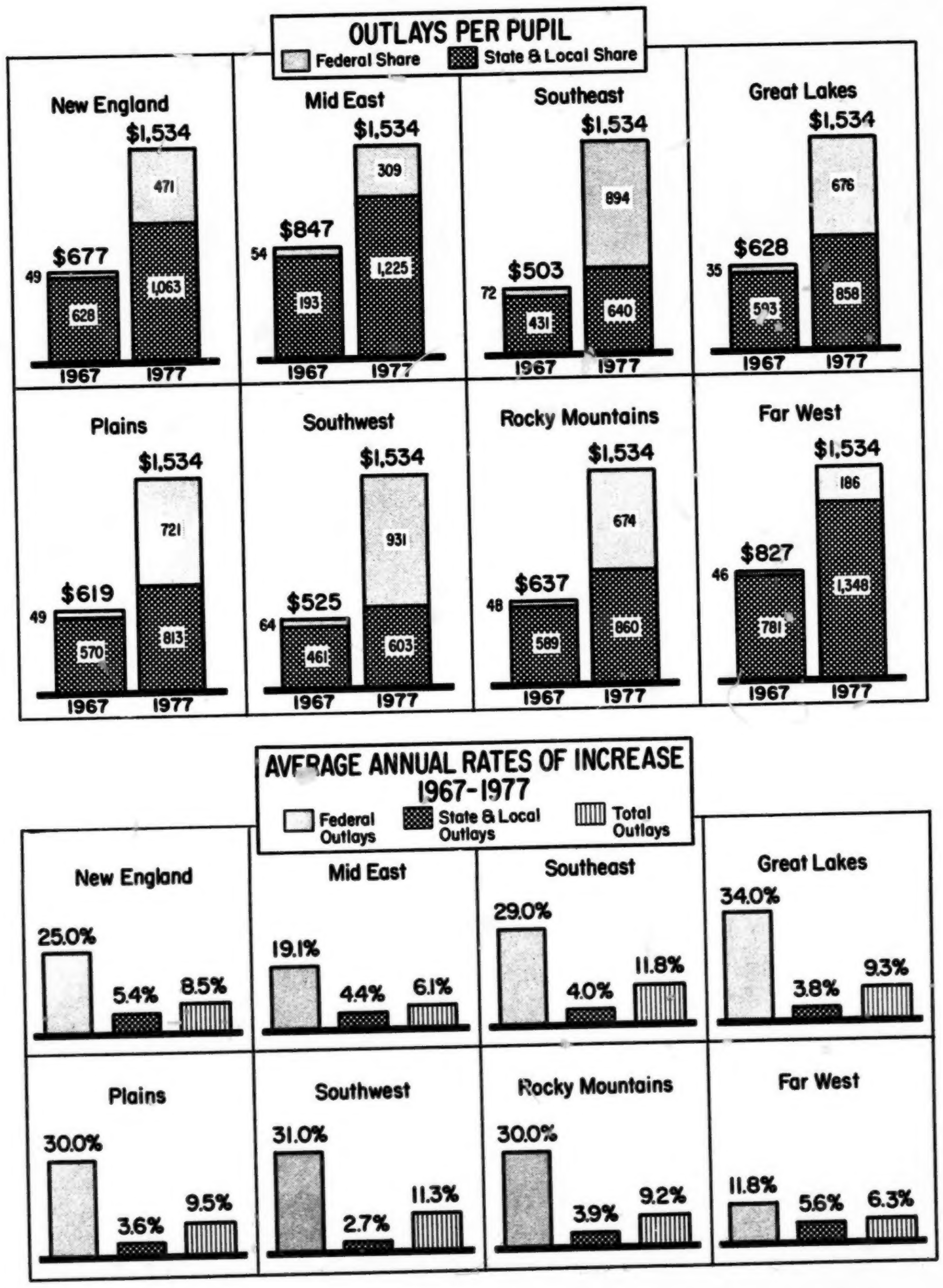
[1] Elementary (including kindergarten) and secondary public schools. School year 1966-1967 shown as 1967, etc.

[2] State and local share based on recent trends in State and local public school expenditures.

Basic Data: Office of Education, Dept. of H.E.W.; National Education Association

PER PUPIL OUTLAYS BY REGIONS, 1967[1] AND GOALS FOR 1977 UNDER METHOD TWO[2]

(1967 dollars)



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[1] Elementary (including kindergarten) and secondary public schools. School year 1966-1967 shown as 1967, etc.

[2] State and local share based on recent trends in State and local school expenditures.

Basic Data: National Education Association; Office of Education, Dept. of H.E.W.

VI. Can America Afford Adequate Education?

Distinction between economic and financial considerations

Few are likely to challenge very substantially the validity of the foregoing estimates of our public-school needs over the decade ahead. But many will challenge our economic and financial capabilities to meet these needs fully without overstraining the economy, without generating excessive inflationary pressures, and without shortchanging other important national priorities. These trepidations require factual assurance that they are not valid.

Although reference has been made to our economic and financial capabilities, there is a clear distinction between economic capabilities and financial mechanisms which is often overlooked. Our economic capabilities depend upon our real resources of manpower and plant, training and skills, farms and factories and other business ventures, instruments of communication, technology and science, enterprise and imagination, and viable economic, social, and political institutions. This is true because these are the elements which in our society determine how much goods and services we can produce from year to year, and the utilization of goods and services is the real substance of our economic life and progress.

Financial mechanisms, involving such issues as money and gold and the balance of payments, and also to a considerable degree changes in the price level, are by no means the same thing as the real economic capabilities described above. How we use these financial mechanisms, in the final analysis, merely affects—importantly, to be sure—whether or not we use our real economic resources fully or only partially, wisely or unwisely.

A nation has the financial means to afford whatever it has the economic capabilities to do, and no one doubted this for a moment during a situation as critical as World War II. Any claim that we do not have the financial means to do what we have the economic capabilities to accomplish merely exhibits lack of the realistic thinking and resolution of purpose which we were forced to call upon in a crisis such as World War II. This does not mean that, under current or foreseeable conditions, we need to invoke such controls as were essential during World War II. It means only that the proposition that we can afford financially what we are able to do economically is always applicable, and when we neglect this proposition we do so at our peril.

For these reasons, deciding how much we can afford to expand the resources which we put into our public schools depends upon the capabilities of the U.S. economy to grow from year to year in the real production of goods and services.

U.S. economic growth potentials and their importance

Looking over the years way back to 1922, it is clear that we have been able to expand our total national production of goods and services at an annual rate in the neighborhood of 5 percent when our economic resources were in reasonably full use. And viewing the advance of technology and automation, and the tendency of the productivity growth rate to accelerate in a favorable economic environment (discussed earlier), it is very conservative indeed to estimate that our real economic growth rate can average annually at least 5 percent a year *after* restoration of reasonably fully resource use. As we are now considerably short of that reasonably full use, we need and can achieve without excessive strain an average annual real economic growth rate of about 6 percent through 1970.

But we have experienced periods, such as 1953-1960, when the average annual rate of real economic growth fell abysmally to 2.4 percent. Again during 1966-1967, the real growth rate was only 2.5 percent, and as of the time of writing the outlook for 1968-1969 is not certain. We therefore need to take all reasonable steps to restore and maintain an optimum rate of real economic growth, particularly because our unmet domestic needs and international burdens are so great under current and foreseeable circumstances.*

We will be even more ready to make the required efforts, when we appreciate even more fully the costs of an inadequate rate of economic growth.

During 1953-1967, when the real rate of growth measured in 1967 dollars averaged annually only 3.5 percent, in contrast with the 4.2-percent potential during those years, we lost in the aggregate an estimated $836 billion in total national production, measured in 1967 dollars. We forfeited 36.5 million man-years of employment opportunity, $171.7 billion of private business investment opportunity, $10,250 in average family income, and $570 billion in wages and salaries.*

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* See chart on page 83.

If the average annual rate of real economic growth were to be only 3.5 percent during 1968-1977, rather than the 5.3 percent which it should average over these years, we would lose $1,195.5 billion of total national production (measured in 1967 dollars), forfeit 32.3-million man-years of employment opportunity and $266.8 billion of private business opportunity, as well as $12,170 in average family income and $715.1 billion in wages and salaries.**

Requirement for optimum economic growth

When periods of recession (negative economic growth) or stagnation (low economic growth) reduce optimum economic growth over the longer run, these setbacks do not occur automatically through any inexorable "economic laws." They occur because the relative rates of development in various sectors of the economy, conditioned mainly by relative income flows, get out of balance. If private consumer spending plus public consumption (public outlays for goods and services) rise more rapidly than our ability to produce, we have classic or excessive-demand inflation.*** If our ability to produce, influenced largely by private investment in producers' facilities, grows more rapidly than private and public consumption, we have so-called excess capacity if not actual "overproduction," and this swells idle plant and manpower, the basic indicators of a deficient rate of economic growth.

Under conditions short of total war, these imbalances in the economy have occurred most generally because the purchasing power of private consumers plus public outlays have not advanced rapidly enough to keep up with the expansion of private business investment and of our ability to produce. To be sure, when these imbalances lead to years of recession or stagnation, private business investment is cut back very sharply.

When we note that, during 1953-1967, we forfeited $619.7 billion of personal consumption expenditures (composed mainly of a deficiency of $570 billion in wages and salaries) and suffered a deficiency of $44.6

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* The precision of the estimates throughout this phase of the discussion does not imply a claim that such precision is in fact attainable. The precision is the result of a method of analysis which reconciles all of the components in a consistent "economic model." Nor does the precision imply that estimates by others might not be different in detail. But this does not affect the validity of the conclusions derived from the "economic model," and in fact many other "economic models" are in broad terms similar to the one used in this study.

** See chart on page 84 and chart on page 85.

*** So-called cost-push inflation is discussed later.

billion in government outlays at all levels for goods and services, this is really the same thing as observing that the failure of these three items to expand sufficiently was the prime cause of the inadequate rate of real economic growth during this period.

And when we estimate that a 3.5 percent* rather than a 5.3 percent rate of real annual economic growth during 1967-1977 would mean during the 10-year period 1968-1977 inclusive a deficiency of $777.5 billion in personal consumption expenditures (caused mainly by deficiencies of $715.1 billion in wages and salaries) and $151.1 billion in government outlays at all levels for goods and services, this really identifies how rapidly these three items need to expand to promote an optimum rate of economic growth through 1977.**

The same empirical conclusion results from examining in some detail the relative trends in various types of economic activity and spending during 1961-1967, when the average annual rate of economic growth was not adequate for the period as a whole, and when a stagnation of large import set in some time during 1966. While private consumer spending during the period as a whole rose only 33.4 percent, wages and salaries only 36.8 percent, labor income including fringe benefits only 41.9 percent, farm proprietors' net income only 2.1 percent, and government outlays for goods and services only 41.5 percent, private investment in plant and equipment rose 63.9 percent, corporate profits 45.1 percent, personal-dividend income 52.7 percent, and personal-interest income 72.4 percent.

From 1966 to 1967, the very slight downward trend in private investment in plant and equipment and the substantial downward trend in corporate profits were responsive to deficient growth rates of 3.0 percent in private consumer spending and 4.6 percent in wages and salaries, and a 12.5 percent decline in farm proprietors' net income. These three adverse trends were insufficiently compensated for by a 10 percent increase in government outlays for goods and services.***

Moreover, the downward trends in private investment and in profits during 1966-1967 were from excessively high levels relative to other components of production and incomes, and equilibrium had not been reached even by the end of 1967. This explains the unsatisfactory outlook for 1968 and 1969 combined. Yet, as of the time of this writing, profits in 1969 were in many key sectors rising and even record-breaking.

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* The actual annual average real rate during 1953-1967.

** See again chart on page 85.

*** See chart on page 86.

Importance of adequate wage and salary increases

The long-term and accumulating deficiency in wages and salaries, so significant in the deficiency in consumer income and spending, is further illustrated by these additional facts: During 1960-1967, wage and salary rates per man-hour worked in the total nonfarm economy rose in real terms at an average annual rate of only 2.8 percent, while productivity rose at an average annual rate of 3.1 percent. In total manufacturing, wage and salary rates per man-hour worked rose in real terms at an average annual rate of only 1.9 percent, while productivity advanced at an average annual rate of 3.2 percent. During 1966-1967, wage and salary rates in both sectors rose much more rapidly than productivity. But this was because the economic stagnation caused the rate of actual productivity growth to fall enormously below the growth rate in the productivity potential (see again the discussion in Chapter IV).*

Economic growth potentials, 1967-1977: the "economic growth dividend"

An optimum rate of economic growth averaging annually 5.3 percent would lift our total national production, measured in fiscal 1969 dollars,** from $829 billion in calendar 1967 to $1,396 billion in calendar 1977, a gain of $567 billion (the "economic growth dividend" in 1977 alone). This would mean that our *average annual* total national production, during the 10-year period 1968-1977 inclusive, would be $303 billion higher than it was in 1967, and for the 10-year period in the aggregate would be $3,031 billion higher, than if the 1967 level of total national production maintained throughout. These are the average annual and aggregate "economic growth dividends." Even at a considerably lower rate of economic growth, the "economic growth dividend" would be $341 billion in 1977 alone, would average annually $178 billion during the 10-year period, and would aggregate $1,776 billion for the 10 years as a whole.***

Balanced lines of development

The balanced development required to achieve this optimum economic growth includes the following trends: From the base year 1967, consumer spending (measured in fiscal 1969 dollars) would need to rise

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* See chart on page 87.

** Fiscal 1969 dollars are used because these approximate the price level at the time of writing, and because this facilitates the later discussion of the Federal Budget beginning with the fiscal year 1969 Budget.

*** See chart on page 88.

$170.2 billion by 1972 and $366.8 billion by 1977, with wages and salaries accounting for somewhat in the neighborhood of two-thirds of these increases. Public outlays for goods and services* would need to rise $46.9 billion by 1972 and $97.4 billion by 1977.** Yet these increases would not distort our traditional division of responsibility between the private economy and public programs. The respective ratios of private consumer outlays, gross private domestic investment, and public outlays at all levels for goods and services to total national production would by 1977 be very close to what they were in 1967.***

The nub of what we can really afford

The above discussion sheds much light on what we can afford with respect to increased investment in our public schools. This study proposes that such investment, measured in 1967 dollars, rise from $28.3 billion in 1967 to $70.1 billion in 1977, an increase of $41.8 billion. In 1977, also measured in 1967 dollars, the "economic growth dividend" resulting from an optimum rate of economic growth would be, as above indicated, $567 billion.**** Surely, we can afford to put less than 7.4 percent of this "economic growth dividend" ($41.8 billion) into achievement of equalized excellence in our public schools. And during the period 1967-1977 as a whole, the aggregate increases of investment in our public schools in ratio to the aggregate "economic growth dividend" over the same period would not be significantly different from in 1977 alone.

This increased investment in our public schools would not interfere unduly with full attention to our other great national priorities, nor with balanced economic progress for all. It has already been noted that this educational program fits into a perspective which includes almost no change in the relative shares of private enterprise and public programs in the composition of total national production. It should also be noted, on the question of what we can afford, that outlays of only about $13 billion (annual rate) or only about 4.3 percent of the average annual "economic growth dividend" of $303 billion, would be sufficient to lift all of those now living in poverty out of the poverty cellar.

Somewhere between one-fifth and one-sixth of the average annual "economic growth dividend" would be sufficient to support adequate servicing (through combined private and public efforts) of all of the great priorities of our national needs, such as education, housing and urban renewal, transportation, health facilities and services, resource development, the cleansing of our polluted air and water, and proper expansion of our social-security and welfare systems. All this is made even clearer by the following discussion of the role of the Federal Budget in promoting economic growth and meeting the priorities of our public needs.

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* This goods-and-services concept is not to be confused with the Federal Budget concept of public outlays discussed later.

** See chart on page 89.

*** See chart on page 90.

**** See again chart on page 88.

The Federal Budget can and should sustain the proposed educational program

The current study proposes that Federal outlays in aid to the public schools throughout the nation should rise to $27.3 billion in calendar 1977, measured in calendar 1967 dollars. The Federal Budget envisioned by this study would include Federal Budget outlays for education totaling $32.9 billion in calendar 1977, measured in fiscal 1969 dollars. Even allowing for the difference between calendar 1967 and fiscal 1969 dollars, this goal takes into account needed Federal Budget assistance to education at other levels (although for good and sufficient reasons it does not propose that these other outlays increase at the same rate as outlays for public schools). Even so, total Federal outlays for education, while rising from $23.16 per capita in fiscal 1969 to $143.79 per capita in calendar 1977, would rise only from 0.53 percent to 2.36 percent of total national production under conditions of optimum economic growth. In fiscal 1969, Federal Budget outlays for national defense, space technology, and all international were $436.66 per capita, and 10.11 percent of total national production.

The chart amplifying this discussion sets forth projected Federal outlays in all important categories, indicating clearly a balanced attention to the priorities of our national needs. Yet total Federal Budget outlays, while rising from $917.01 per capita in fiscal 1967 to $1,223.77 per capita in calendar 1977, would decline from 21.02 percent of total national production to 20.06 percent. This indicates that we can meet our national needs without higher levels of Federal taxation than are now in effect.*

It may be pointed out that we may not in fact achieve optimum economic growth. But the assumption that we may not achieve optimum economic growth is no reason for abandoning those very efforts which will augment our likelihood of achieving it. And even if we do not achieve it during some periods, this provides no reason for curtailing the expansion of those public outlays directed toward the great priorities of our national needs, and certainly not with respect to our public schools. For whenever the rate of economic growth is inadequate, higher rather than lower levels of public outlays—not in excess of real needs—mitigate the inadequate rate of growth and quicken the return to the optimum.

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* See chart on page 91.

Likewise, if a deficient rate of economic growth in future were to lead to Federal deficits at given tax rates (which has been the main reason for recent very large Federal deficits), attention to the deficit in the national economy should be given priority over the deficit in the Federal Budget; and, besides, this would be the safest and surest way to combat any such deficit in the Federal Budget.

The issue of inflation, both fact and fallacy

Let us start by accepting the proposition that any substantial rise in prices and especially in the cost of living—this being a good general definition of inflation—is undesirable. We can accept this proposition, for the purposes of this study, even though it is true in general that a moderately falling or rising price level (as well as a stable price level) may be compatible under given other conditions with optimum economic growth and social justice, or with just the reverse. To explain why this is true would be an unnecessary digression in this study.

But it is utterly fallacious to assert that the desire to stabilize prices and the cost of living, under current or foreseeable circumstances, should serve as a legitimate excuse for starving or shortchanging in any degree whatsoever the great priorities of our national needs, of which public education is close to the top if not foremost on the domestic scene.

Optimum economic growth promotes price stability

The most prevalent argument advanced in support of the utterly fallacious assertion just referred to is that, in order to avoid inflation, we should adopt conscious policies to hold our real economic growth rate below the optimum. It is manifest, for reasons already developed fully, that holding our economic performance below the optimum adversely affects every aspect of economic performance and enjoyment of goods and services. Its impact upon the public sector is especially severe, because the lower rate of expansion of real economic activity injures the tax base from which public revenues to support public programs are extracted at any given level of taxation.

Moreover, the truth is (although unfortunately it has not yet gained general public acceptance) that there has been a negative rather than a positive correlation during recent years between the rate of real economic growth and the amount of price inflation.

During 1955-1958, when the rate of real economic growth averaged annually only 0.8 percent, the average annual rates of price increase were in the neighborhood of 2.5 percent for consumer prices, wholesale prices, and industrial prices. During 1956-1958, when the average annual rate of real economic growth was only 0.2 percent, the average annual rates of price increase were 3.1 percent for consumer prices, 2.2 percent for wholesale prices and 1.5 percent for industrial prices. But during 1958-1960, when the average annual rate of real economic growth rose to 4.3 percent, the average annual rates of increase were only 1.2 percent for consumer prices, 0.1 percent for wholesale prices, and 0.9 percent for industrial prices. And during 1960-1968, when the average annual rate of real economic growth was 4.8 percent, the average annual rates of increase were only 2.0 percent for consumer prices, 1.0 percent for wholesale prices, and 0.9 percent for industrial prices. But from 1966 to 1968, when the rate of real economic growth fell to 3.7 percent, consumer prices rose annually 3.5 percent and wholesale prices 1.3 percent, with the increase in industrial prices being 2.0 percent.

Similarly, the notion that lower levels of unemployment induce price inflation is insupportable, or at least is so dubious that it cannot justify acceptance of the excessive levels of unemployment which exist even now. During 1955-1958 or 1956-1958, when the rates of real economic growth were virtually negligible full-time unemployment of the civilian labor force averaged annually 4.9 percent and 5.1 percent, respectively. But during 1960-1968, when the rate of real economic growth was about 6 times as high as during the earlier of the two periods just cited, and 23 times as high as during the later of these periods, the average annual rate of full-time unemployment, while averaging 4.9 percent for the period as a whole, was reduced from 5.5 percent in 1960 to 3.6 percent in

1968, and basically this reduction occurred before the new inflation set in.*

There are very rational explanations for these trends. In many important sectors of our economy, prices do not respond automatically to the so-called law of supply and demand. Instead, these prices are "administered" by conscious decisions. And when inadequate economic growth is accompanied by inadequate expansion of sales, the effort is made to compensate for inadequate volume through higher returns per unit by virtue of price increases. This conclusion is fortified by many specialized studies of various industries, which do not require citation here. Thus, with respect to this very important segment of the problem of preventing inflation, it is self-defeating to try to combat inflation by stunting real economic growth.

Another reason why an inadequate rate of real economic growth generates inflationary tendencies involves the relationship between productivity and the rates of advance in wages and salaries. As pointed out in an earlier chapter, during periods when a reasonably high (even though less than optimum) rate of economic growth has encouraged high nationwide gains in productivity, the rates of increase in wages and salaries have tended to fall very substantially behind the gains in productivity. But during periods of very low economic growth, such as from 1966 to 1967, the productivity growth rate falls so sharply downward that the rates of increase in wages and salaries are much higher than the concurrent productivity gains. As this increases labor costs per unit of output, which is sometimes called cost-push inflation, the remedy, of course, would be to reactivate the rate of economic growth and thus to expand productivity gains, rather than to use the so-called cost-push inflation as an excuse for aggravating the very conditions which have led to the low rate of real economic growth.

In the nonadministrated price areas, the advances in the cost of living in recent years have been especially serious with respect to medical care and housing. But the increased costs of medical care have not been due to an excessively growing economy, nor to too low a level of unemployment, nor to excessive purchasing power in the hands of the people directed toward obtaining medical services. Instead, one of the most important reasons for the rising costs of medical care, and the inability of millions of our citizens to obtain adequate medical care at costs within their means, is the nationwide shortage of medical facilities and personnel, aggravated by maldistribution of both throughout the nation. And the very reason for these shortages is that, in the name of combating inflation, we have not spent enough to expand these medical facilities and services. Much the same comments apply to housing costs, aggravated by the unconscionable upward spiral of interest rates, spuriously justified in the name of fighting inflation.

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* See chart on page 92. The true level of unemployment, taking into account (1) full-time unemployment, (2) the full-time equivalent of part-time unemployment, and (3) the concealed unemployment due to nonparticipation in the civilian labor force due to scarcity of job opportunity, was 9.9 percent in 1958 and 8.0 percent in 1960, but only 5.7 percent in 1966, and considerably lower in 1967 and 1968.

It thus becomes clear that attempts to fight inflation by stunting economic growth and shortchanging the great priorities of our national needs are economically unwise on all scores.

The moral aspects of the case

But even if the above analysis were faulty, it is shamefully unjust for a nation to tell the poor and unemployed, the miserably housed and the undereducated, that they should pay the costs of protecting the affluent, and those even better off, against inflation. The social restiveness and resentment caused by this process enormously outweighs the alleged gains.

If our economy at any time finds itself in a situation where cutbacks or restraints at some point are needed to reduce overstrain and to prevent inflation, the cutbacks or restraints should be imposed at points which restrain superfluous or even excessive activities and enjoyments, not at points which sacrifice what we most need to do. This calls, as many have properly insisted, for a substantial reordering of our nationwide priorities and purposes, lest we become a nation where wealth accumulates and men decay.

To illustrate, let us assume a situation where the $70.1 billion which we should be spending for our public schools in 1977 exerted inflationary pressures upon the economy (when combined with all other spending) to the extent of $20 billion in terms of our productivity capabilities in that year.

In that event, instead of cutting back on public outlays for this vital purpose, we would have many infinitely preferable choices. Closing the notorious tax loopholes would in itself take care of $10-15 billion of this $20 billion problem. A cutback of less than 2.3 percent in the $883.6 billion level of private consumer outlays projected for 1977 in this study would take care of this $20 billion problem. And this cutback could be achieved through increases at points in the tax structure which would hurt nobody, and would constitute a mere bagatelle of restraint compared with the urgency of public-school needs. That portion of the immense Federal tax cuts and concessions during 1962-1968 (having an annual value close to $20 billion) which were granted where they were not really needed, and which indeed aggravated the imbalances in the economy, would take care of at least $10 billion of this $20 billion problem.

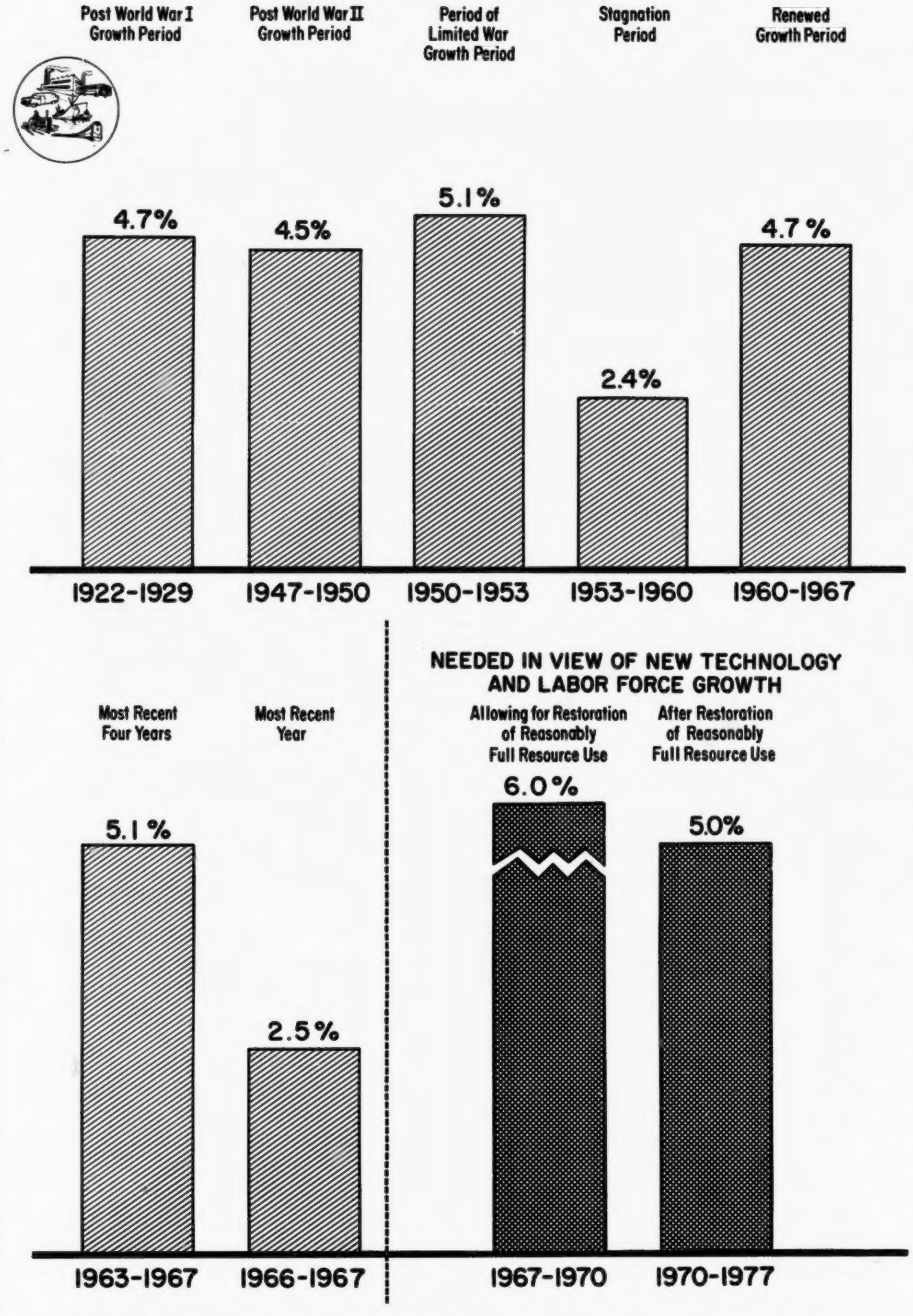
Putting this in other terms, inflation is really immoral prosperity, and the whole inflationary problem is a moral problem—the problem of encouraging the flow of benefits to where they are most needed, and imposing burdens where they can best be borne.

The problem of achieving adequate education in our public schools is similarly a moral problem, a problem of our purposes and aspirations as a nation and a people. The real reason why we have thus far neglected to service our public schools as well as we should is not lack of economic capabilities nor of financial mechanisms, but rather lack of moral resolve.

And this lack of moral resolve is doubly damaging, because meeting fully the needs within our public schools would not even pose the hard choice to help those who need help most at the expense of those who need help least. Meeting these needs fully would help all, because the highest values of the Republic and all it stands for are to be found in the development of the young people who are our greatest national asset.

U.S. ECONOMIC GROWTH RATES, 1922-1967, AND NEEDED RATES, 1967-1977, FOR OPTIMUM RESOURCE USE

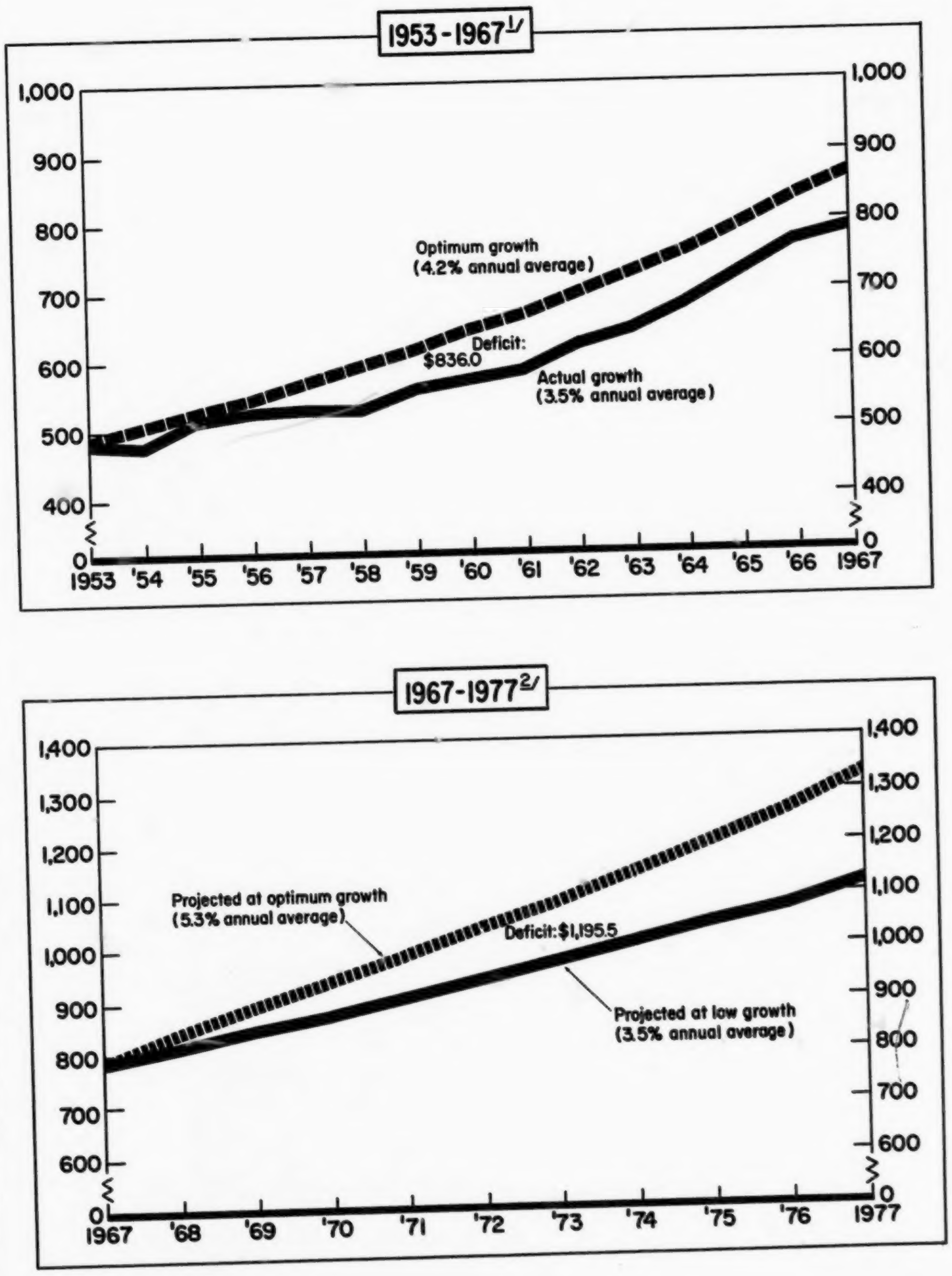
Average Annual Growth Rates in GNP, Constant Dollars



Source: Basic Data from the Office of Business Economics.

SIGNIFICANCE OF OPTIMUM ECONOMIC GROWTH U.S. ECONOMY, 1953-1967 AND 1967-1977

(billions of 1967 dollars)



[1] Projected from base year 1947; thus deficits shown are for 1953-1967 inclusive.

[2] Deficits shown are for 1968-1977 inclusive; 1967 deficit written off.

Basic Data: Dept. of Labor

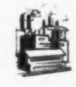
COSTS OF DEFICIENT ECONOMIC GROWTH
U.S. ECONOMY, 1953-1967 AND 1968-1977

(dollar items in billions of 1967 dollars)

1953-1967

Total National Production (GNP) 1953-1967: $836.0 1967: 78.4	**Man-years of Employment**[1] 1953-1967: 36.5 Million 1967: 1.4 Million	**Personal Consumption Expenditures** 1953-1967: $619.7 1967: 58.9	**Gov't Outlay for Goods and Services** 1953-1967: $446 1967: -7.0
Private Business Investment (Incl. Net Foreign) 1953-1967: $171.7 1967: 25.5	**Average Family Income** 1953-1967: $10,250 1967: 974	**Wages and Salaries** 1953-1967: $570.0 1967: 54.2	**Unincorporated Business and Professional Income** 1953-1967: $71.0 1967: 6.7

1968-1977

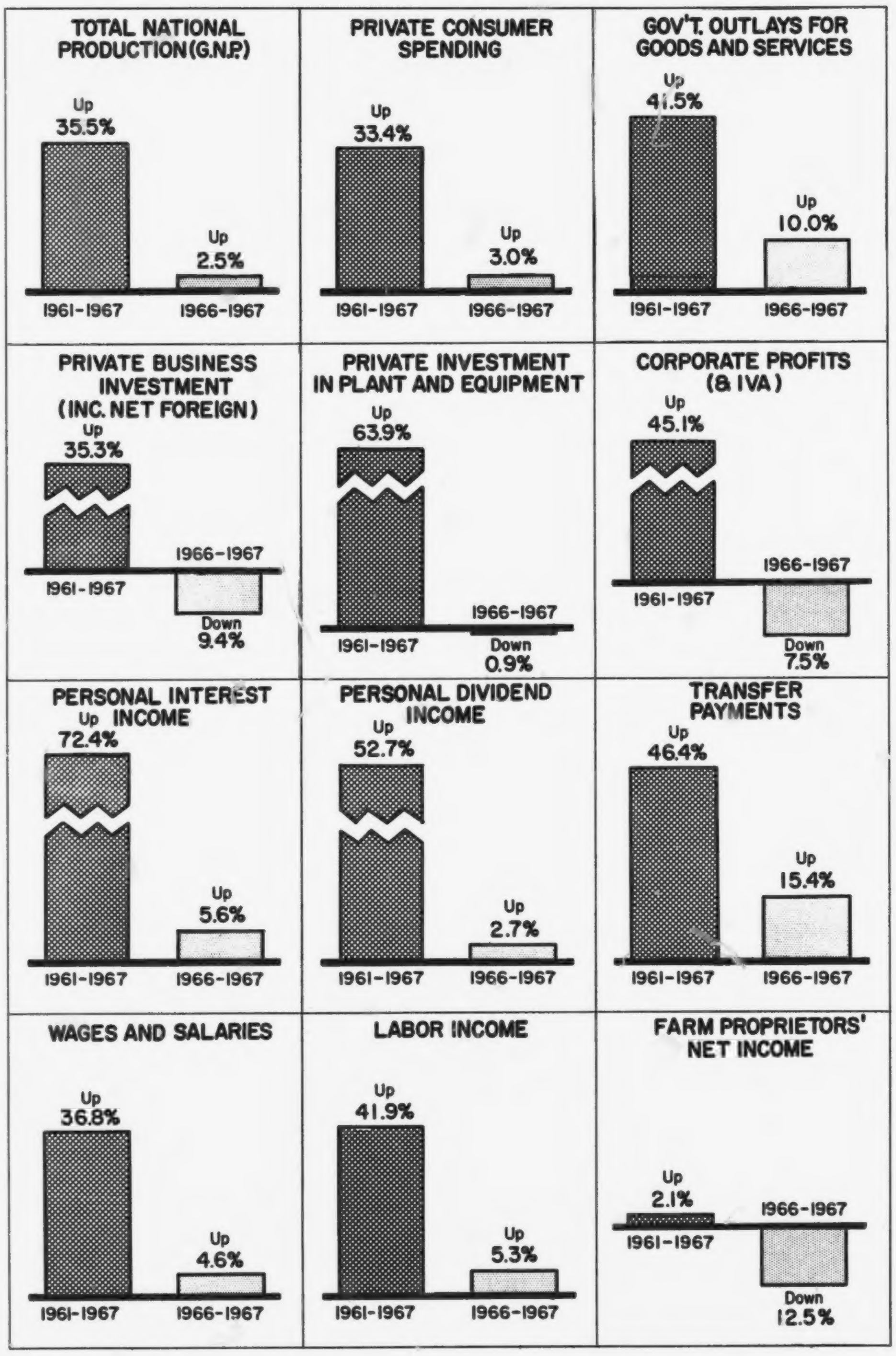
Total National Production (GNP) 1968-1977: $1,195.5 1977: 215.4	**Man-years of Employment**[1] 1968-1977: 32.3 Million 1977: 5.0 Million	**Personal Consumption Expenditures** 1968-1977: $777.5 1977: 144.4	**Gov't Outlay for Goods and Services** 1968-1977: $151.1 1977: 27.2
Private Business Investment (Incl. Net Foreign)  1968-1977: $266.8 1977: 43.8	**Average Family Income** 1968-1977: $12,170 1977: 2,349	**Wages and Salaries** 1968-1977: $715.1 1977: 132.8	**Unincorporated Business and Professional Income** 1968-1977: $89.1 1977: 16.6

[1] Based upon true level of unemployment concept, including full-time unemployment, full-time equivalent of part-time unemployment, and concealed unemployment (nonparticipation in civilian labor force) due to scarcity of job opportunity.

Basic Data: Dept. of Commerce; Dept. of Labor

COMPARATIVE GROWTH IN VARIOUS ASPECTS OF U.S. ECONOMY 1961-1967

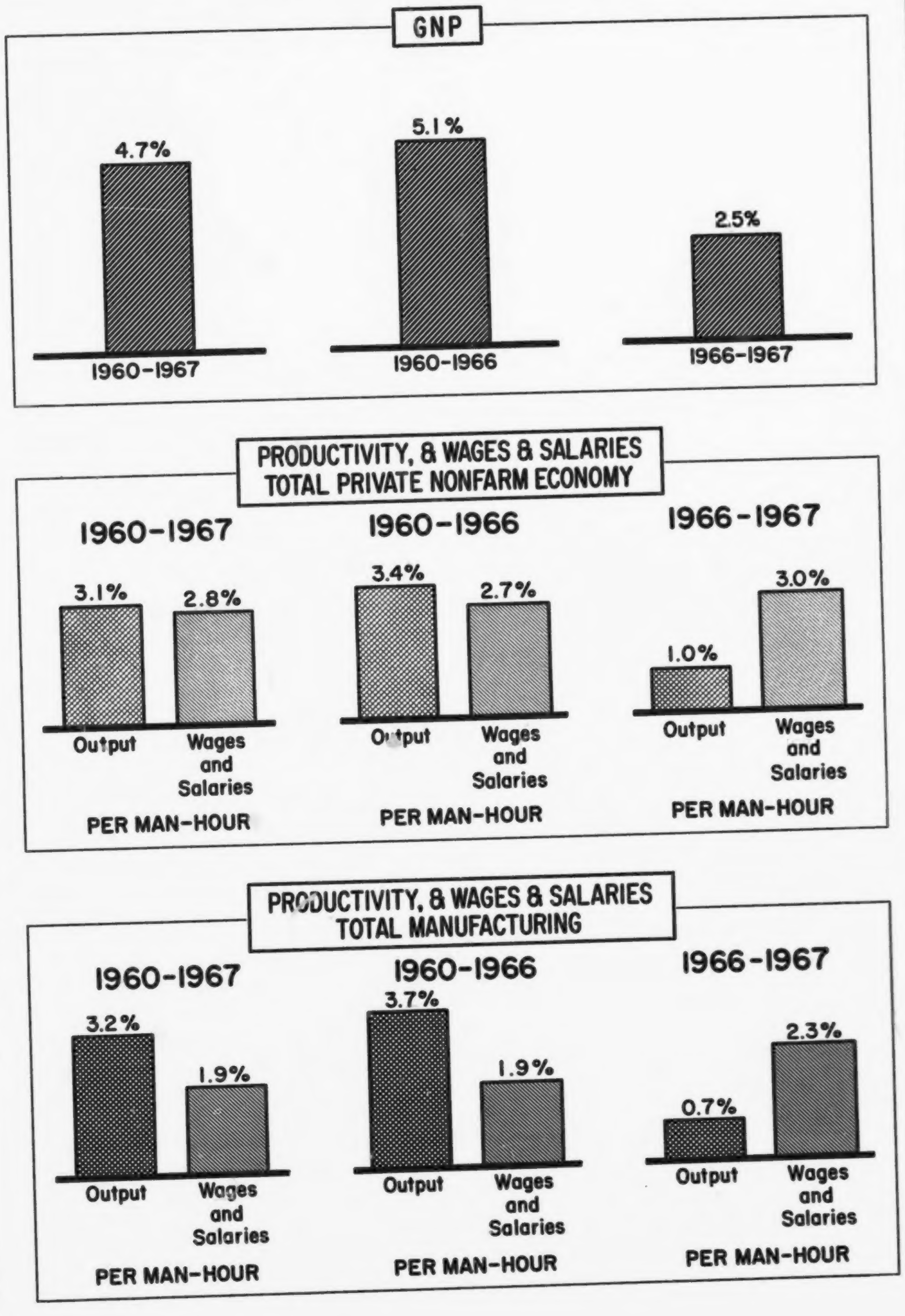
(Constant Dollars)



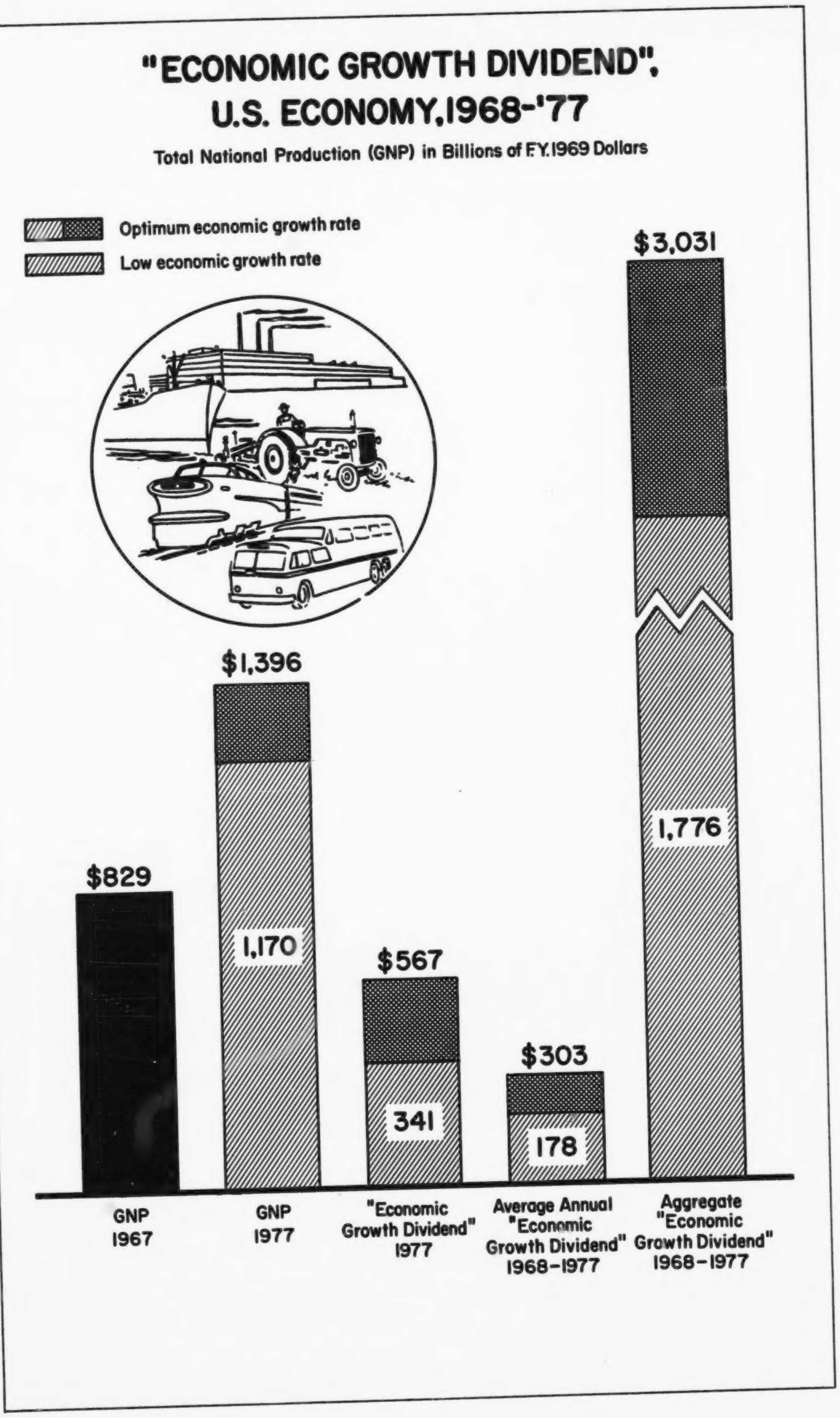
Source: Dept. of Commerce, Office of Business Economics and CEP.

THE LAG IN WAGES AND SALARIES BEHIND PRODUCTIVITY GAINS, 1960-1967

(average annual increases, constant dollars)



Basic Data: Dept. of Commerce; Dept. of Labor

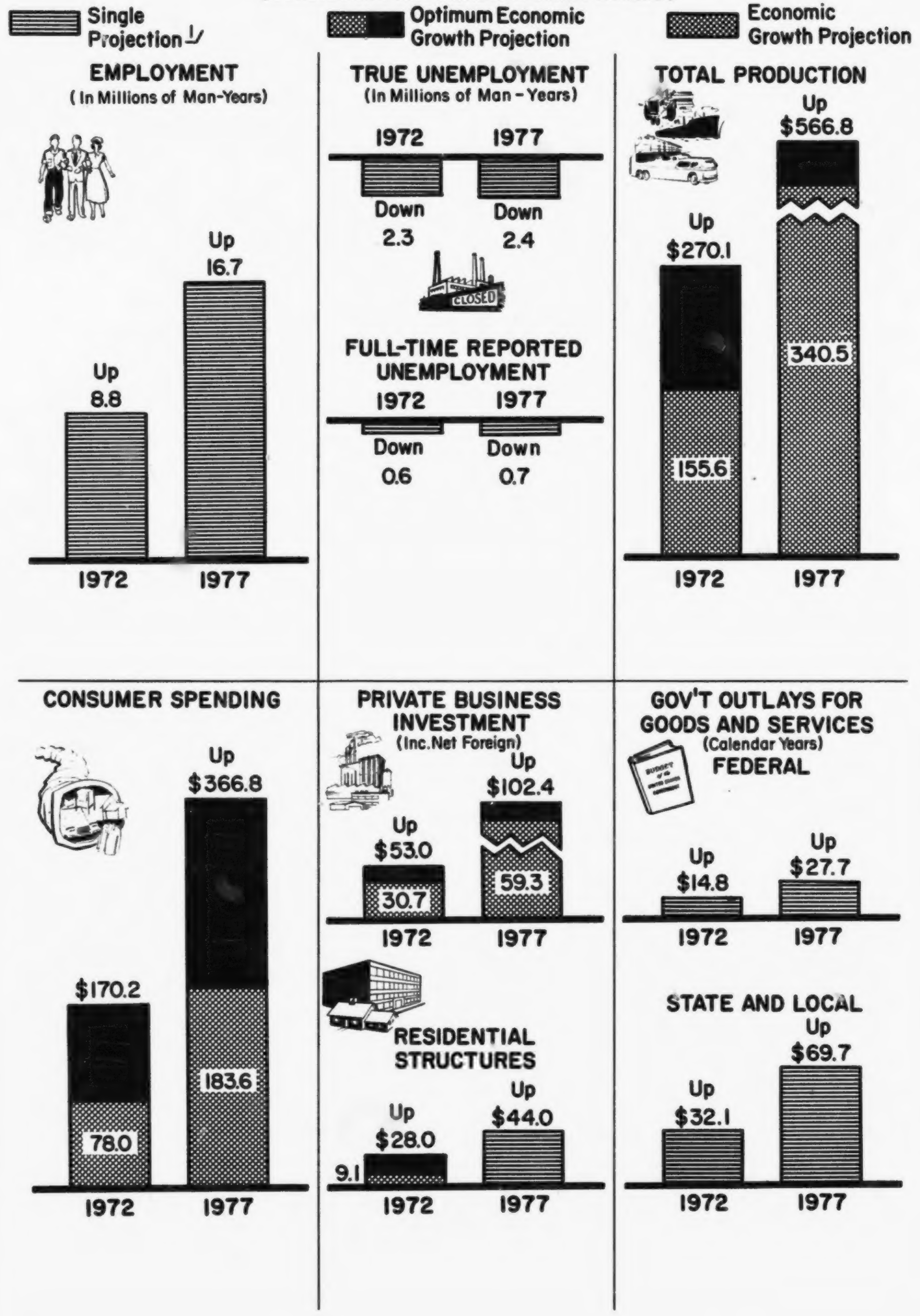


"ECONOMIC GROWTH DIVIDEND". U.S. ECONOMY, 1968-'77

Total National Production (GNP) in Billions of F.Y. 1969 Dollars

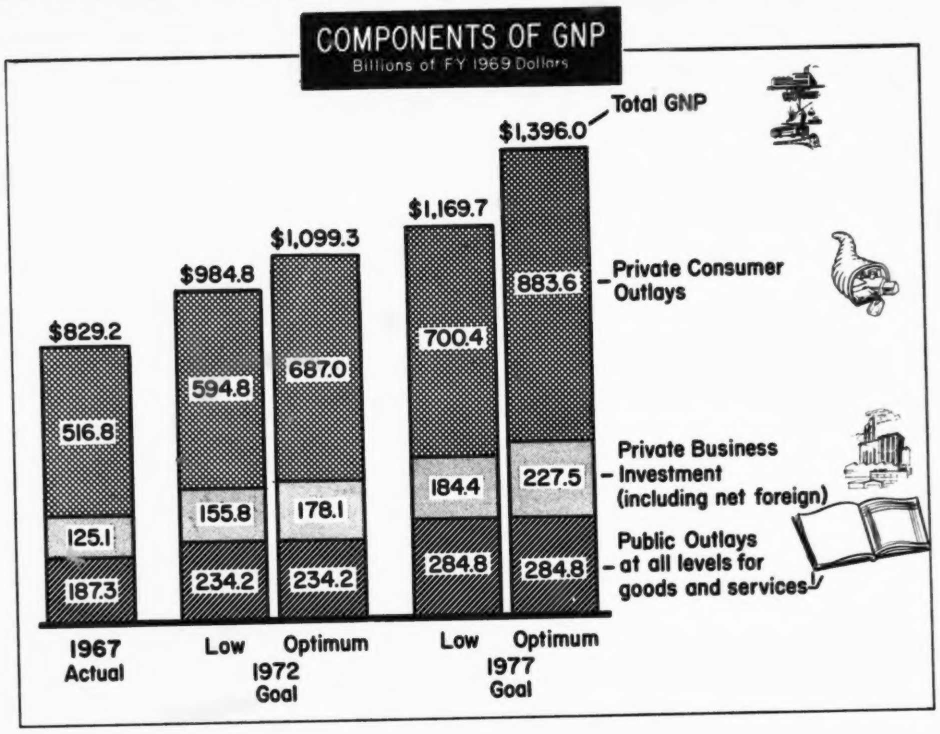
GOALS FOR THE U.S. ECONOMY, 1972 & 1977 PROJECTED FROM LEVELS IN 1967

(Dollars Items in Billions of F.Y. 1969 Dollars)



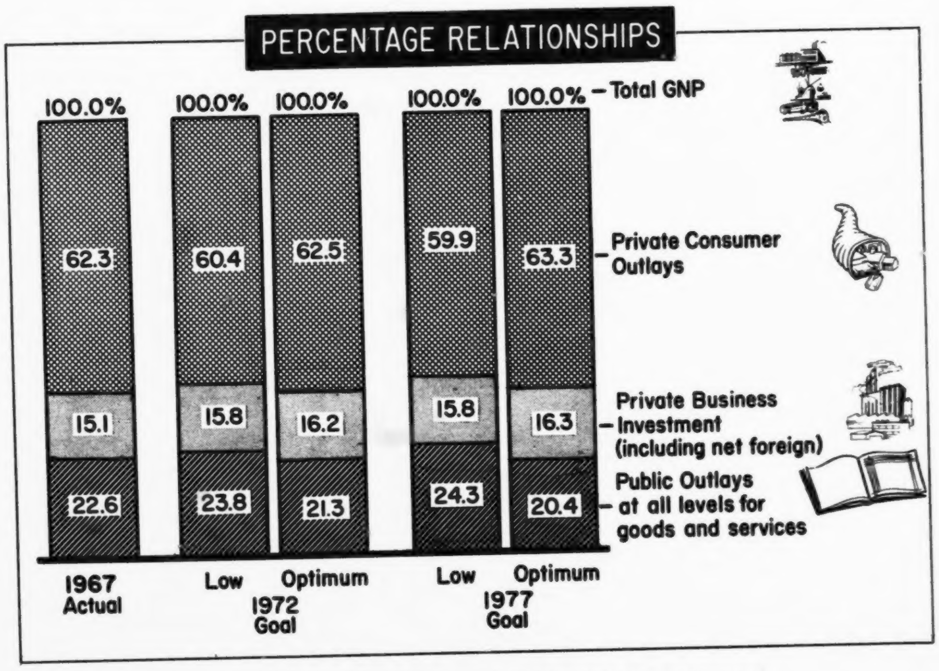
1/ The single projections relate to goals of such high priority that they should not be reduced even if only the lower goals for GNP are attained. In that event, lower priority objectives should be modified accordingly.

THE GOALS FOR 1972 AND 1977 MAINTAIN BALANCE OF PUBLIC AND PRIVATE RESPONSIBILITIES



COMPONENTS OF GNP

Billions of FY 1969 Dollars



PERCENTAGE RELATIONSHIPS

1/ Public outlays are of such high priority that they are projected identically for the lower and higher GNP goals, with modifications of other goals accordingly.

GOALS FOR A FEDERAL BUDGET, 1972 AND 1977, GEARED TO ECONOMIC GROWTH & PRIORITY NEEDS

1969, fiscal year; goals for 1972 and 1977, calendar years

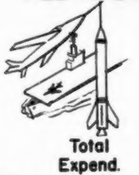
All figures in fiscal 1969 dollars [1]

ALL FEDERAL OUTLAYS

THE BUDGET OF THE UNITED STATES GOVERNMENT

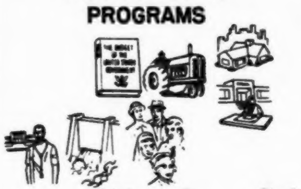
Year	Total Expend. (Bil. $)	Per Capita ($)	% of GNP (%)
1969[2]	186.062	917.01	21.02
1972	226.500	1,068.90	20.61
1977	280.000	1,223.77	20.06

NATIONAL DEFENSE, SPACE TECHNOLOGY, & ALL INTERNATIONAL



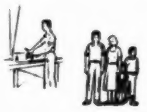
Year	Total Expend. (Bil. $)	Per Capita ($)	% of GNP (%)
1969[2]	89.515	441.18	10.11
1972	90.000	424.73	8.19
1977	94.000	410.84	6.73

ALL DOMESTIC PROGRAMS



Year	Total Expend. (Bil. $)	Per Capita ($)	% of GNP (%)
1969[2]	96.547	475.84	10.91
1972	136.500	644.17	12.42
1977	186.000	812.93	13.32

ECONOMIC OPPORTUNITY PROGRAM

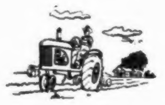


Year	Total Expend. (Bil. $)	Per Capita ($)	% of GNP (%)
1969[2]	2.000	9.86	0.23
1972	3.800	17.93	0.35
1977	5.500	24.04	0.39

HOUSING AND COMMUNITY DEVELOPMENT

Year	Total Expend. (Bil. $)	Per Capita ($)	% of GNP (%)
1969[2]	2.784	13.72	0.31
1972	5.500	25.96	0.50
1977	9.000	39.34	0.64

AGRICULTURE; AND NATURAL RESOURCES



Year	Total Expend. (Bil. $)	Per Capita ($)	% of GNP (%)
1969[2]	8.099	39.91	0.91
1972	12.000	56.63	1.09
1977	15.500	67.75	1.11

EDUCATION

Year	Total Expend. (Bil. $)	Per Capita ($)	% of GNP (%)
1969[2]	4.699	23.16	0.53
1972	16.200	76.45	1.47
1977	32.900	143.79	2.36

HEALTH SERVICES AND RESEARCH

Year	Total Expend. (Bil. $)	Per Capita ($)	% of GNP (%)
1969[2]	10.655	52.51	1.21
1972	14.000	66.07	1.27
1977	20.000	87.41	1.43

PUBLIC ASSISTANCE; LABOR, MANPOWER, AND OTHER WELFARE SERVICES

Year	Total Expend. (Bil. $)	Per Capita ($)	% of GNP (%)
1969[2]	6.280	30.95	0.69
1972	9.500	44.83	0.86
1977	15.100	66.00	1.08

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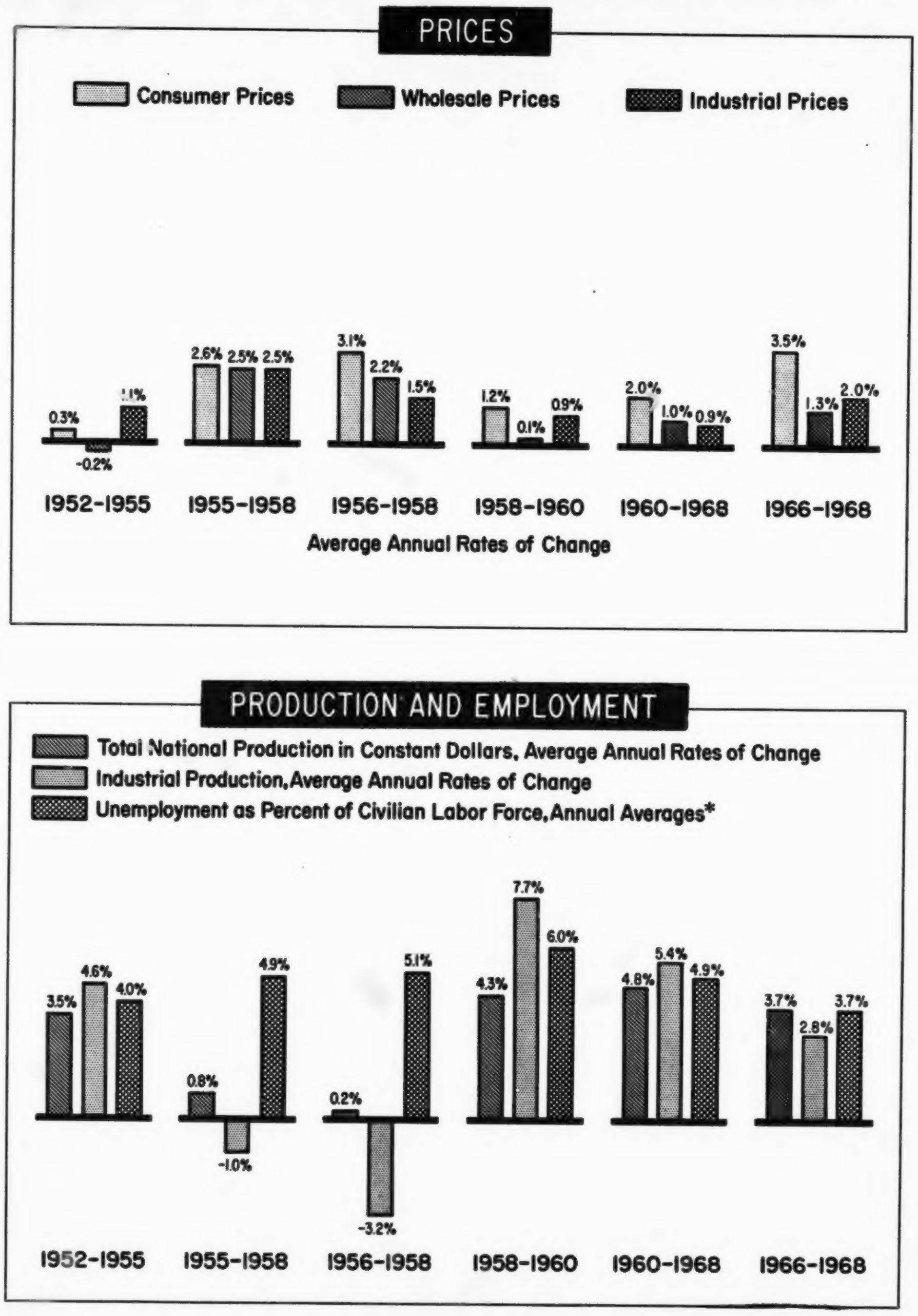
[1] Dollars of purchasing power apparently assumed in President's fiscal 1969 Budget.

[2] Administration's Proposed Budget as of Jan. 29, 1968. Beginning with fiscal 1969, the Budget includes the immense trust funds, net lending, and other relatively minor new items. Note: Goals include Federal contributions of one b in 1970, and more than two b in 1977, to the OASDHI to help increase benefit payments to the aged.

RELATIVE TRENDS IN ECONOMIC GROWTH UNEMPLOYMENT, & PRICES, 1952-1968[1]



[1] Preliminary 1968 data.

*These annual averages (as differentiated from the annual rates of change) are based on full-time officially reported unemployment measured against the officially reported Civilian Labor Force.

Source: Dept. of Labor, Dept. of Commerce, & Federal Reserve System.